OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro* GAMER™

STAGE 129

AMSTRAD | COMMODORE | SEGA | NINTENDO | ATARI | SINCLAIR | NEO GEO | SONY | COIN-OP | MOBILE

THE HARDEST GAMES OF ALL TIME

WE REVEAL THE TOUGHEST GAMES YOU'RE EVER LIKELY TO EXPERIENCE



WHO NEEDS GTA?

AS DRIVER TURNS 15, CREATOR MARTIN EDMONDSON DISCUSSES THE CULT SERIES

MIDNIGHT RESISTANCE

YOUR ULTIMATE GUIDE TO DATA EAST'S SPECTACULAR SCROLLING SHOOTER

THE LIFE, DEATH AND LEGACY OF

MAZE GAMES

• GAUNTLET • LADYBUG • MAZE WAR • PENGO • TROG • RALLY-X • BERZERK • BOMBERMAN • TURTLES • MOUSETRAP • OH, AND PAC-MAN

ALSO INSIDE!

BLITZ | RJ MICAL | ROBOCOP
PANZER DRAGOON MINI | MC LOTHLORIEN
BROKEN SWORD 5: THE SERPENT'S CURSE

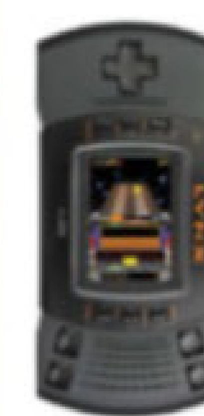
RETURN TO HEARTLAND



STEVE WETHERILL EXPLAINS THE INSPIRATION BEHIND HIS STUNNING SPECTRUM MASTERPIECE



IMAGINE PUBLISHING
DigitalEdition
GreatDigitalMags.com
ISSUE 129



25 YEARS OF ATARI LYNX

WHY YOU NEED TO CHANGE YOUR OPINION OF ATARI'S INNOVATIVE HANDHELD

THE RETROBATES FAVOURITE MAZE GAME



DARRAN JONES

Mr Do is borderline, so I'm going to go for *Pac-Man Championship Edition*. A game that shook up the genre.

Expertise:
Juggling a beautiful wife, two gorgeous girls and an award-winning magazine

Currently playing:
Broforce

Favourite game of all time:
Strider



NICK THORPE

I had a real soft spot for *Pac-Mania* as a kid – it was less frustrating because Pac-Man could jump over enemies.

Expertise:
Owning seven Master Systems

Currently playing:
Home Town Story

Favourite game of all time:
Sonic The Hedgehog



PAUL DRURY

Phantom Slayer on the Dragon 32. It's like that terrifying Public Information Film from the Seventies warning kids about the dangers of 'dark and lonely water' but you can blast the Grim Reaper.

Expertise:
Parking lot parties

Currently playing:
Clean Up Service (C64)

Favourite game of all time:
Sheep In Space



STEVE HOLMES

Doom obviously (if it counts). It's one of them shooty-man gun games I like, and it's in a maze.

Expertise:
Impressions of Sean Bean, mostly from *GoldenEye*

Currently playing:
Wolfenstein: The New Order

Favourite game of all time:
The Legend Of Zelda: Ocarina Of Time



JONATHAN WELLS

Doom, even though I shouldn't have been playing at the age of five, nothing like running round corridors not knowing what waits to meet my chainsaw!

Expertise:
Tackling dirty nappies and retro spreads

Currently playing:
Lego Marvel Super Heroes

Favourite game of all time:
The Secret Of Monkey Island



DAVID CROOKES

Will the magic of *Pac-Man* ever die? Not while there are people like me who still enjoy evading the ghosts today.

Expertise:
Amstrad, Lynx, adventures, *Dizzy* and PlayStation (but is that retro? Debate!)

Currently playing:
Broken Sword 5: The Serpent's Curse

Favourite game of all time:
Broken Sword



PAUL DAVIES

Well, it's *Pac-Man*! But, for the sake of being different I remember being really amazed by Namco's *Rally-X*, thinking games couldn't possibly become much cleverer.

Expertise:
Repeatedly banging my head against a brick wall

Currently playing:
Grand Theft Auto V

Favourite game of all time:
Ghouls 'N' Ghosts



JASON KELK

I'm not sure if *Paradroid* counts as a maze game, but I'm going to say it anyway!

Expertise:
Making things up on the go

Currently playing:
Up 'N' Down (Apple II)

Favourite game of all time:
Io

LOADING...



I recently started collecting Japanese Mega Drive games. I could have saved myself some money and picked up PAL games, but I wanted the delicious artwork that often adorned my favourite games. I'm also a big sucker for game instruction books, and many of the Mega Drive efforts are truly superb.

Being the person that I am, I also recently picked up an Atari Lynx and several games. While the artwork is nowhere near as impressive, I do love the fact that many of the instructions double up as mini posters, that once upon a time, I'd have been happy to stick on my wall.

What a pity then that instruction books are becoming as rare as hen's teeth in modern games. It hit me hardest when I imported *Ys: Memories Of Celceta* for the PS Vita (did I tell you I like to collect things?). Anyway I bought this absolutely sumptuous box set that came with all manner of pointless things that I'd never need, opened the game case and found… no instructions. Yes I know it's been happening for a while now, but it seemed such a silly omission when so much money had been spent elsewhere.

So imagine my surprise when *Putty Squad* turned up complete with instruction book. Granted it was only eight pages in total, but at least it's a start.



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>> Load 129 Breathing new life into classic games





RETRO RADAR

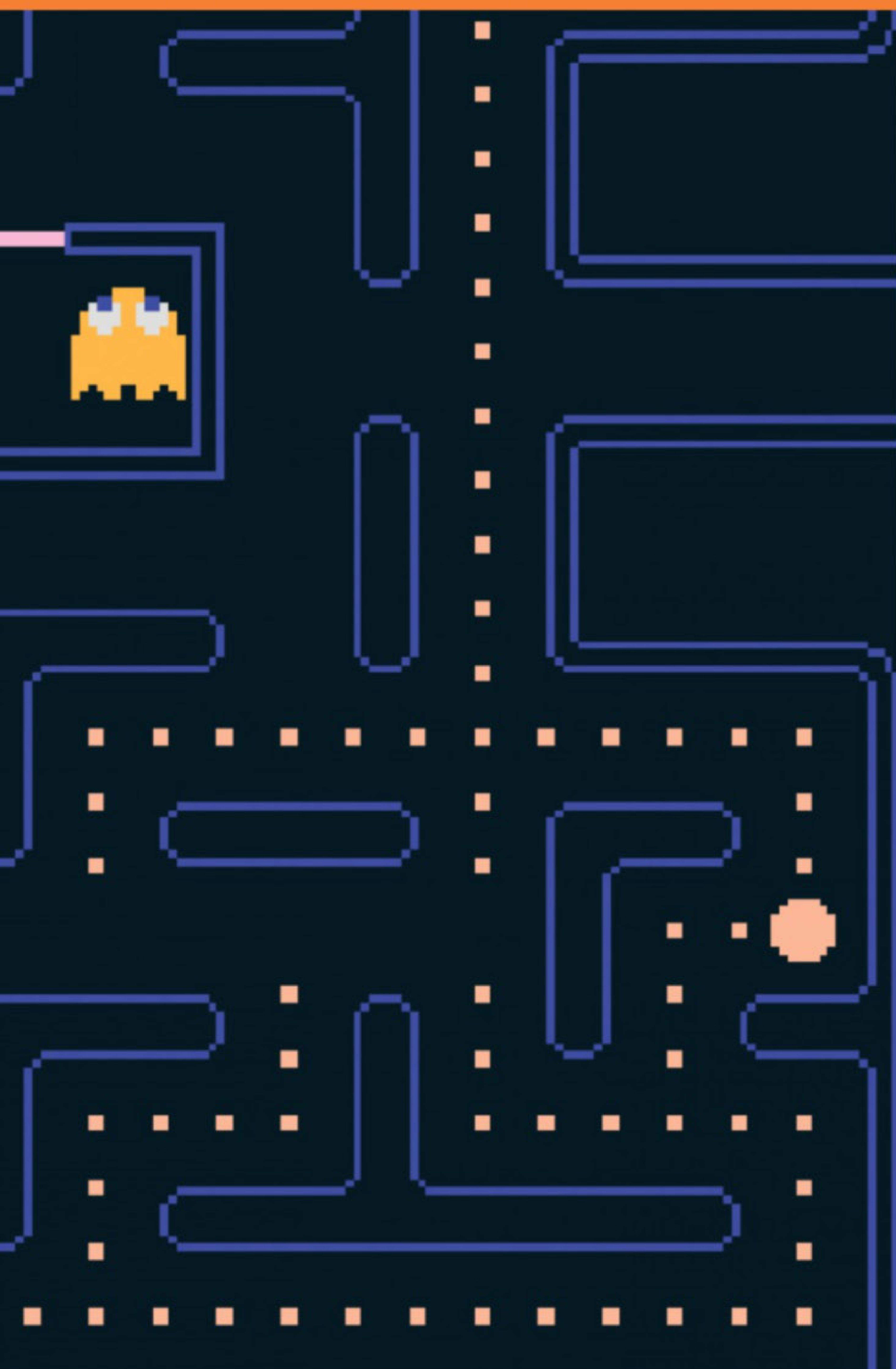
REVIVALS

FEATURED



Don't forget to follow us online for all the latest retro updates

 RetroGamerUK  @RetroGamer_Mag  retrogamer@imagine-publishing.co.uk

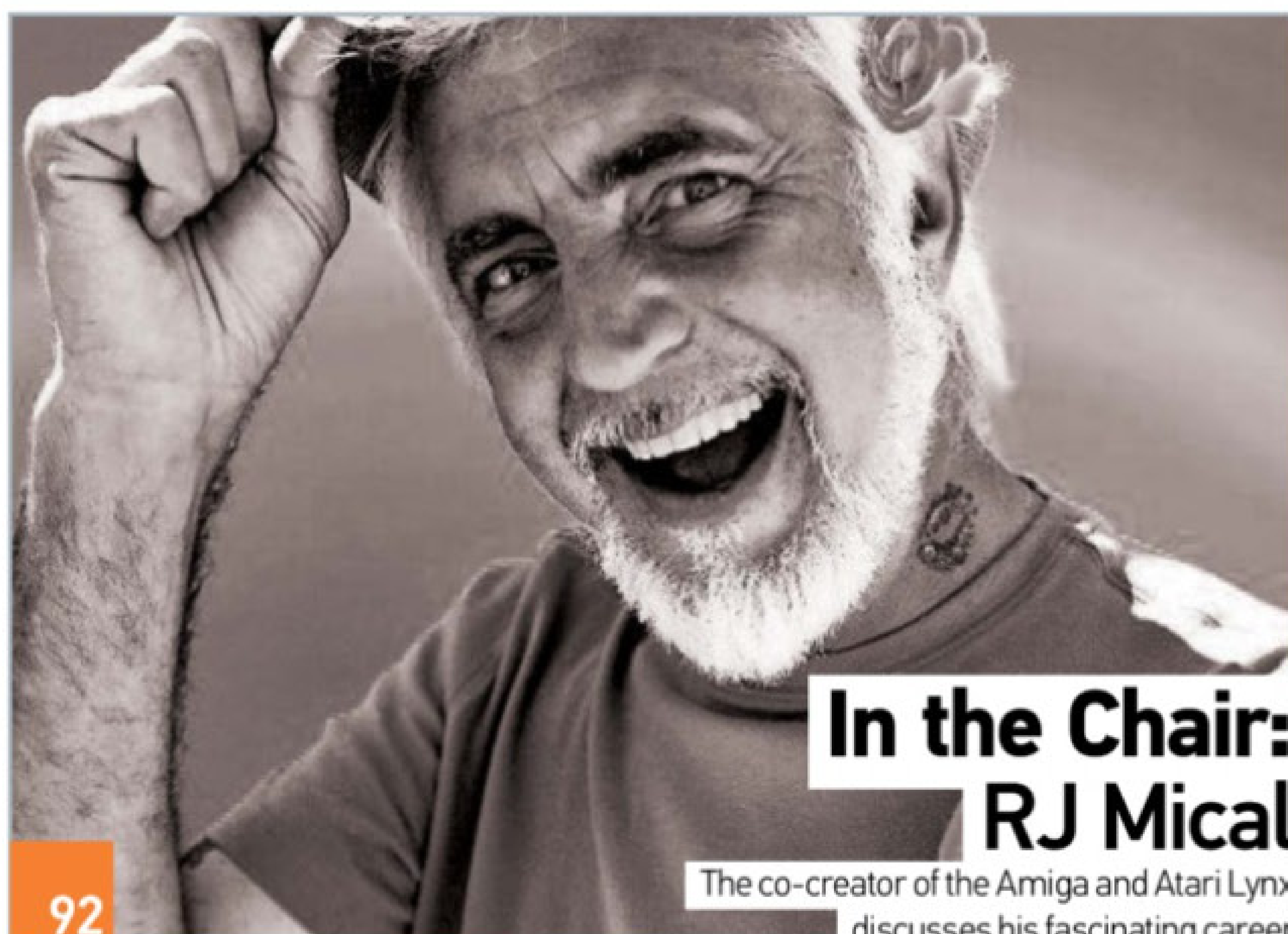






"I seriously loved it then and still do. The step up technically from the Game Boy was huge"
Daryl Still





REVIEWS



ESSENTIALS

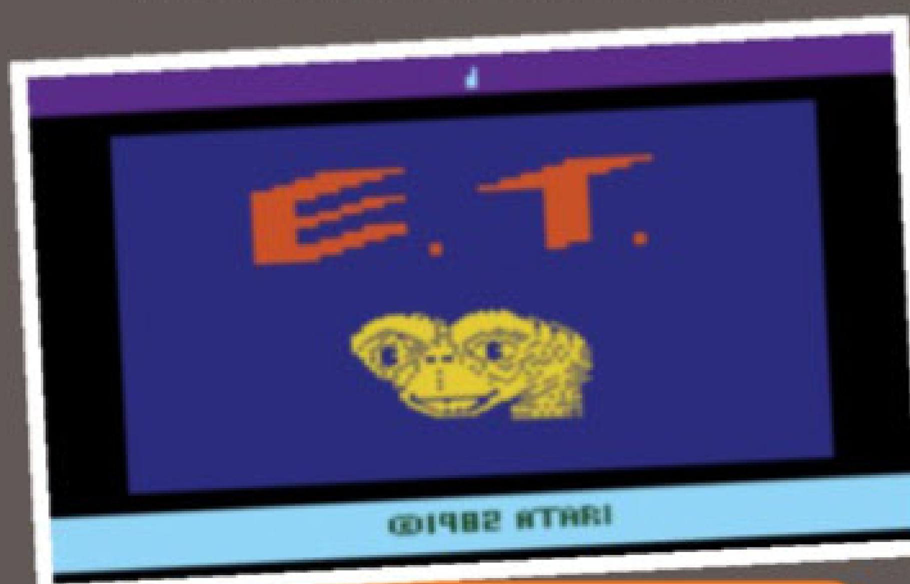


retro radar

GIVE US TWO MINUTES AND WE'LL GIVE YOU THE RETRO WORLD



>> The biggest news of the month surrounds the ET games being dug up in a New Mexico desert. We also look at everything else that's been happening in the world of retro this month



FOUND SO FAR

>> ET Wasn't the only game dug up...

- Adventure
- Asteroids
- Air-Sea Battle
- Berzerk
- Centipede
- Circus Atari
- Combat
- Defender
- Dodge 'Em
- Haunted House
- Human Cannonball
- Maze Craze
- Missile Command
- Night Driver
- Pac-Man
- Pele's Soccer
- Phoenix
- Raiders Of The Lost Ark
- Real Sports: Football
- Space Invaders
- Star Raiders
- Super Breakout
- Superman
- Swordquest: Fireworld
- Vanguard
- Warlords
- Yar's Revenge





Atari 5200

- Defender
- Qix
- Robotron



THE ET MYTH EXPOSED?

HYPED EXCAVATION REVEALS... NOTHING WE DIDN'T ALREADY KNOW

The myth surrounding *ET The Extraterrestrial* on Atari's 2600 is one of gaming's most enduring tales. The rumour was that Atari's game was a massive bomb at retail and because of this the studio had millions of unsold cartridges left on its hands. With no way of moving them, the cartridges were taken out into the New Mexico desert and buried in a landfill at Alamogordo.

It's a lovely, romantic notion – the game has also been linked to the great American videogame crash – but the reality was actually a lot different. On 28 September 1983 the *New York Times* ran an article that has no doubt helped fuel the infamous fable. Atari's manufacturing plant in El Paso, Texas was being converted to recycle scrap and the studio needed to find a new home for its unwanted stock. As a result 14 trucks containing videogames, console and computer parts were taken to Alamogordo, New Mexico and buried. They were steamrolled and then concrete was poured over many of the games, (which included *ET* amongst them) and everyone moved on with their lives. The original story and its conclusion was well documented in the excellent book *Atari Inc: Business Is Fun*, which was written by Curt Vendel and **Retro Gamer** freelancer Marty Goldberg. The myth was essentially debunked.

It's been amusing then to see the internet go wild over the recent events that took place on 26 April. A film company called Fuel Entertainment had been funded by Microsoft Entertainment Studios to make a documentary about the infamous story. Aided and abetted by several key Atarians, including Jim Heller, the man responsible for the dumping back



■ *ET* was one of over 20 games that were found at the dig site in Alamogordo, New Mexico. Exact numbers are still unknown at this time.

in 1983 and *ET* creator Howard Scott Warshaw, the team began digging and found… exactly what had been first reported in 1983. Jim Heller even took along the original documents, which revealed that *ET* cartridges only formed a small percentage of the 728,000 games buried there, instantly dispelling the 'millions of cartridges' myth. Despite this, stories are still running that claim the myth to be real.

While we've been unsurprised by the 'discovery' the documentary itself sounds promising, so we were keen to find out a little bit more about its origins. "At Xbox Entertainment Studios, our goal is to create interactive, original content for Xbox and other Microsoft devices that will change the way entertainment is experienced," revealed a Microsoft spokesperson. "We developed our first slate of original programming with an eye toward the Xbox audience, primarily males ages 18-34. The Atari legend has long been of interest to our audience so was a natural choice."

As a result Microsoft and Fuel Entertainment have been working carefully with officials in Alamogordo and while we're unlikely to discover what was under that concrete – digging was only allowed for a single day – the work on both sides has produced some interesting finds. "The state has been wonderful to work with," continued our source. "There was normal back-and-forth to ensure that the excavation is safe and environmentally responsible, which we respect and appreciate. We wanted to make sure we and everyone else was safe while we make this film."

» Microsoft and Fuel Entertainment have teamed together to create a new documentary that will look at how the *ET* myth came to be. Currently known as *Atari: Game Over* it will be heading to both the Xbox 360 and Xbox One later on in the year and is directed by Zac Penn.





The documentary, currently called *Atari: Game Over*, is directed by Zak Penn and also features Jonathan Chinn as an executive producer. We were keen to know just how much involvement *ET*'s original creator was going to have, and it turns out that he's going to be a pivotal part of the story. "Howard Scott Warshaw is one of the characters in the film," confirms Chinn. "You can't really tell the story about Atari, and definitely not the story of *ET* the videogame, without Howard Scott Warshaw. He's part of the film and will be in Alamogordo for the dig to find out whether his beloved game is, in fact, buried in 25 feet of garbage."

With the team hopefully aware of what they were going to find thanks to Jim's documentation, the big question is what stance the documentary is going to take. We're hoping that the focus is going to be more about how the myth could have come about, as any other approach would be pretty disingenuous. It's the myth side of the story that has caught the interest of Penn, who has previously written scripts for a number of high profile Marvel movies, including *The Incredible Hulk* and *X2*. "That's really what the movie is about," he tells us. "That's the question I'm trying to answer – why has it lasted? I think it's to do with the unique place Atari holds in our culture. For some people, it represents the burial of that time. This kind of nostalgia combined with the first, best game company – if Atari didn't crash and burn, I don't think people would care as much. I think people see it as something was lost and it buried, and somehow if we dig it up, we'll get it back."

It's a pleasing sentiment to be sure, but will the game itself be redeemed? If you play it you might discover that it's not quite as atrociously bad as many gamers like to make out nowadays. We were keen to know if Zac himself had played the game that has garnered the public's attention for the past few weeks. "Sure, many times," he tells us. "There's no question it's got some bugs. [But] the more I study it, the more I realise it's got some interesting choices for its time, some that didn't necessarily work that well. I think if people call it the worst game ever made, they haven't played a lot of games…" ✱



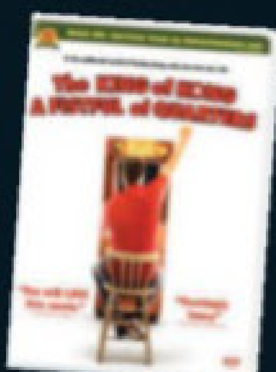
» 728,000 games were confirmed via documentation, so we're not sure why everyone is acting so happy.



» Director Zak Penn poses with one of the *ET* cartridges that were found at the infamous dig site.

DOCUMENT THIS » The videogame documentaries you must watch

THE KING OF KONG



■ The two main protagonists are no longer *Donkey Kong* world champions, but that doesn't mean you shouldn't watch this fascinating documentary. It remains a superb insight into what drives individuals to be the best of the best. And yes it does feature the amazing *You're The Best* by Joe Esposito.

COMMERCIAL BREAKS



■ This BBC drama was supposed to show a company (Imagine Software) at the height of its powers, a company ready to unleash the infamous 'mega-game' *Bandersnatch* that would change videogames. Instead the documentary team found a company on the brink of ruin thanks to serious financial mismanagement.

ONCE UPON ATARI



■ While you're waiting for Microsoft's new documentary, we'd recommend this fine effort from none other than Howard Scott Warshaw. It's full of amazing anecdotes about the early days of Atari Inc and gives insight into its legendary parties, it's interesting work ethic and why it was such a creative think tank.

CHASING GHOSTS: BEYOND THE ARCADE



■ This documentary focuses on Walter Day, the founder of Twin Galaxies, and nine of the 16 key players who appeared in the famous *Life* magazine photograph and went on to compete in the televised 1982 Video Game World Championships. It's an exhaustive look at the golden period of the Eighties arcade scene.

INDIE GAME: THE MOVIE



■ While it revolves mainly around 16-bit-styled platformer *Super Meat Boy*, it also covers *Braid* and *Fez* (which was still unreleased at the time of the documentary). Its players come across as a little precious at times, but it does help explain why indie developers play such an important role in today's industry.

Photos courtesy of Microsoft

the wall

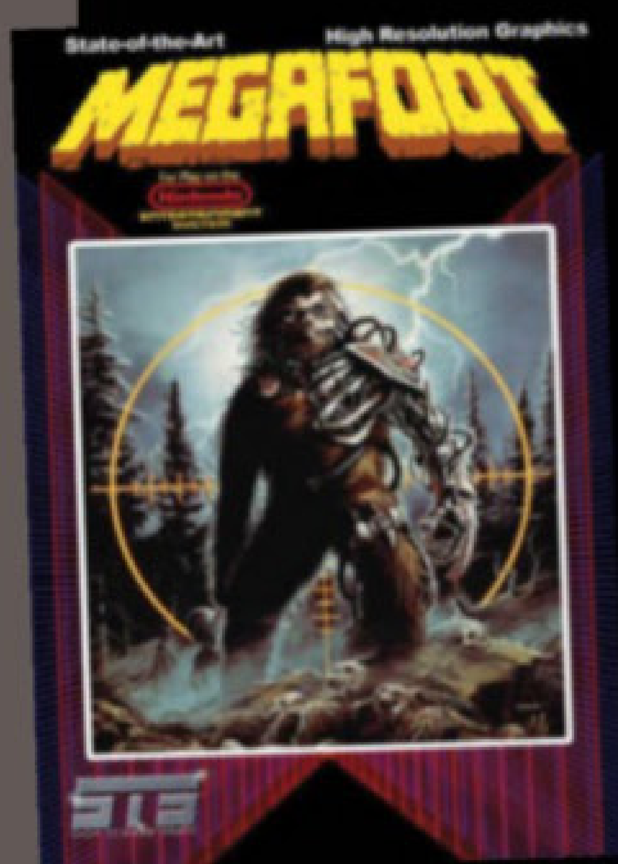
» EVERYTHING THAT'S BEEN HAPPENING IN THE WORLD OF RETRO THIS MONTH



MEGAFOOT

PRESS START

» [NES] The NES version of *Megafoot* uses *Bio Force Ape* as a starting point, but does contain original content.





» *Megafoot*'s designers have clearly taken care in crafting an authentic retro aesthetic for the box art.



RISE OF THE RETRO REWARDS

CROWDFUNDING CAMPAIGNS OFFER LIMITED EDITION NINTENDO CARTRIDGES

While we've seen retro software like *Redux: Dark Matters* and *Pier Solar HD* crowdfunded through sites like Kickstarter, it's rare to games for classic platforms offered as perks for larger projects. Recently though, a couple of pioneering teams have done exactly that, offering cartridges for classic Nintendo platforms to entice the public into backing their projects.

Over on Indiegogo, Big Deez Productions has been offering celebrity-signed golden SNES cartridges for its major project. That project is *Shaq-Fu: A Legend Reborn*, a tongue-in-cheek reimagining of the basketball superstar's martial arts videogame, so the game is fittingly a reproduction of the project's inspiration. With only 200 copies available the cartridge is a genuine collectible, but actually donating to receive such a product might have proved a double-edged sword – while a $100 contribution could have netted you a genuine rarity, you would have essentially paid $100 for a copy of *Shaq-Fu*. At the time of writing the campaign was ongoing, but 20 copies had been spoken for.

Even more scarce than the golden *Shaq-Fu* is *Megafoot*. The Indiegogo campaign was actually focused on creating a costume and trailer for a retro-styled monster movie, but additionally offered a NES game as a perk. "We decided to support *Megafoot* with a NES game because it seems like the kind of game that LJN or Ocean would have licensed to make a game out of in the Eighties," said John Brennan of the *Megafoot* team. "With that idea in mind, we decided to have the game made so that our backers could have a unique collectible to treasure."

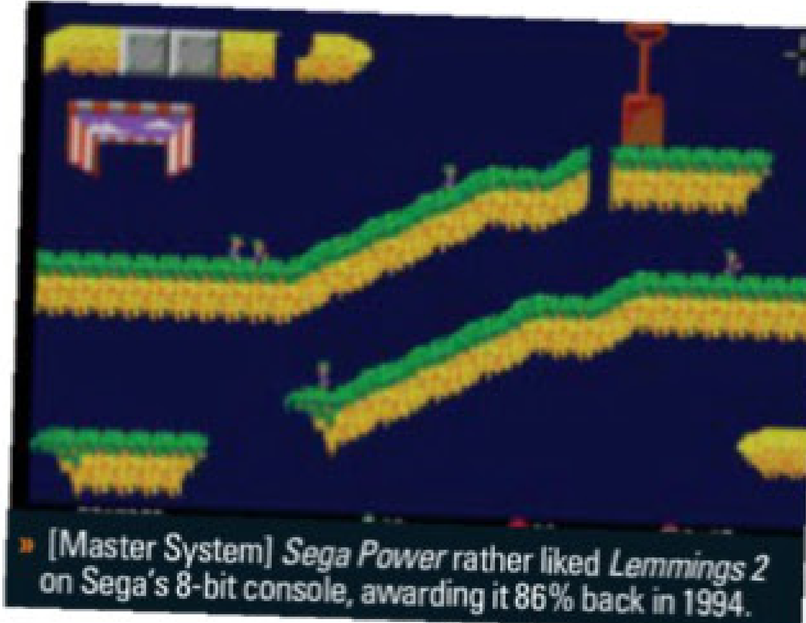
A great amount of care has to be put into such collectibles, due to the discerning tastes of the collectors. *Megafoot*'s production team has had to include everything a NES game would have done in the Eighties, from the cardboard box and manual right down to the dust cover and even the polystyrene block that padded the package. But what of the game itself? "The game is actually a modification of the legendary unreleased NES game *Bio Force Ape*," John tells us. "We've repurposed the story so that instead of the Ape, the player takes control of Megafoot as he escapes from the government research facility that has been experimenting on him. Essentially, the game serves as a playable prequel to the film."

It's not a brand new game, then, but it does convey the spirit of the project quite well. As John asks, "Who wouldn't want to play as a genetically modified Bigfoot who can take people out with a German Suplex?" The reward was rather popular – despite only adding the game a week prior to the end of the campaign and setting a relatively hefty contribution requirement of $150, *Megafoot*'s team managed to find owners for 18 of the mere 25 available copies. As a publicity stunt, the success is hard to question – those contributions represent almost 14 per cent of the campaign's total intake. It will be interesting to see what emerges as other crowdfunding projects realise the appeal of retro gaming…

LONG LOST LEMMINGS RESCUED

NEW SEGA VERSIONS OF LEMMINGS 2 FOUND

It's fair to say that *Lemmings 2: The Tribes* wasn't quite as widespread as its ubiquitous predecessor – where the original made official appearances on over 20 platforms, the sequel arrived on just eight. However, official conversions for the Master System and Game Gear have surfaced in a complete state as ROM files, courtesy of former Spidersoft developer Matt Taylor. The conversions had been developed for release in 1994 and were even sent out for review, but Psygnosis ultimately decided against releasing them due to the declining software sales on Sega's 8-bit platforms. With their release, two more games thought long lost have been preserved for gamers to enjoy.



» [Master System] *Sega Power* rather liked *Lemmings 2* on Sega's 8-bit console, awarding it 86% back in 1994.

MOST EXCITED ABOUT

PRINCE OF PERSIA

We're hearing rumours of a new 2D entry in the series, running on the UbiArt engine that powered the recent *Rayman* games. If the rumours are true, we can't wait.





» [SNES] *Fire Pro Wrestling* remains Masuda's most enduring work, with games appearing on a variety of different formats.

RIP MASATO MASUDA

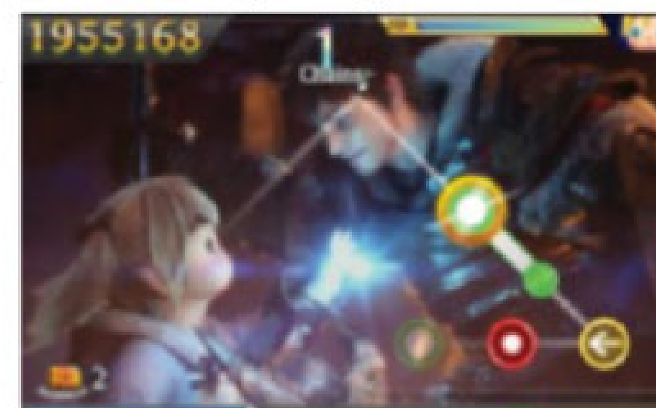
FIRE PRO WRESTLING CREATOR PASSES AWAY

Retro Gamer has learned that Japanese developer Masato Masuda passed away on 29 March 2014, aged 48. Masuda's first work to gain a following in the West was the NES game *Pro Wrestling*, which he developed as a one-man project. He later rose to prominence during his time at Human Entertainment as the creative force behind *Fire Pro Wrestling* – a series of grappling games that has enjoyed continued success since its introduction in 1989, even enduring the closure of Human Entertainment. Developers and fans paid tribute via Twitter, including former Human Entertainment colleague and Killer7 developer Goichi Suda, who stated "I genuinely pray for his happiness in the next world. He was one of the greatest creators of videogames and he was my direct teacher." Our thoughts are with Masuda's family and friends at this very sad time.

THEATRHYTHM CURTAIN CALL ANNOUNCED

FINAL FANTASY MUSIC GAME RECEIVES 3DS ENCORE

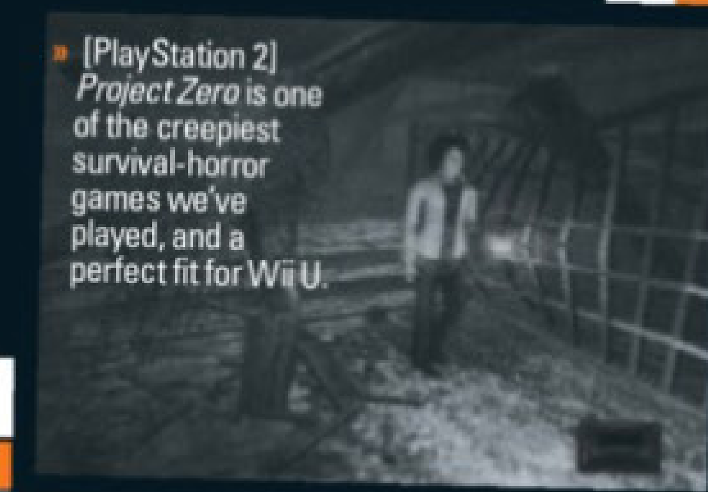
Throughout the long history of the *Final Fantasy* series, one of its most consistently well-regarded features has been the classic soundtracks that accompany each game. Such is the regard for these tunes that a 3DS game, *Theatrhythm Final Fantasy*, was created around them – and it proved a surprise hit, eventually making the leap to iOS devices. As a result, the game is receiving a 3DS sequel with over 60 characters and over 200 tracks, from the beginning of the series right through to modern releases. Even spin-off games like *Crisis Core: Final Fantasy VII* and *Final Fantasy Mystic Quest* are to be represented, so we're looking forward to a very comprehensive game.



YOU'VE BEEN FRAMED

PROJECT ZERO TO RETURN ON WII U

Tecmo Koei has confirmed that it is developing a new sequel to its spooky snap-'em-up *Project Zero* (or *Fatal Frame*, in North America), to be released exclusively on Wii U. The series was introduced in 2001 on the PS2, but has recently been appearing on Nintendo platforms, with the last two being Wii exclusives. The console's GamePad controller functions as the in-game camera, allowing players to scan their environment for paranormal activity. Western releases are by no means certain – only one of the two Wii games made it – but we'll be sure to keep you all updated.



» [PlayStation 2] *Project Zero* is one of the creepiest survival-horror games we've played, and a perfect fit for Wii U.

THE VAULT

THE COOL RETRO STUFF THAT WE'VE HAD OUR EYE ON THIS MONTH

PICK OF THE MONTH

Street Fighter Deck-Building Game

Street Fighter has received the board game treatment before, but this is the best game we've yet experienced. Players pick one of the franchise's well known fighters (from Ryu, to M Bison) with the aim to score as many victory points as possible. Points are typically scored by beating the current Stage Boss, but you'll first need to ensure that your deck is strong enough to defeat them. To do this, players take it in turns to buy new cards from a row of five called the Line-Up, using the cards in their hands to pay for them. Once purchased, cards go to the discard pile until the player runs out of new cards to draw. The discard pile is then shuffled to became your new draw deck, ensuring that your deck slowly builds in power over time. Eventually you'll be able to unleash your character's signature move, which will give you a much stronger chance of success. A slick release with great art design that even non-*Street Fighter* fans should enjoy.

Price: £24.99
From: www.boardgameguru.co.uk



"For us regular civilians this T-shirt simply looks quite nice and doesn't attract gunfire"



Metal Gear Solid FOX T-Shirt

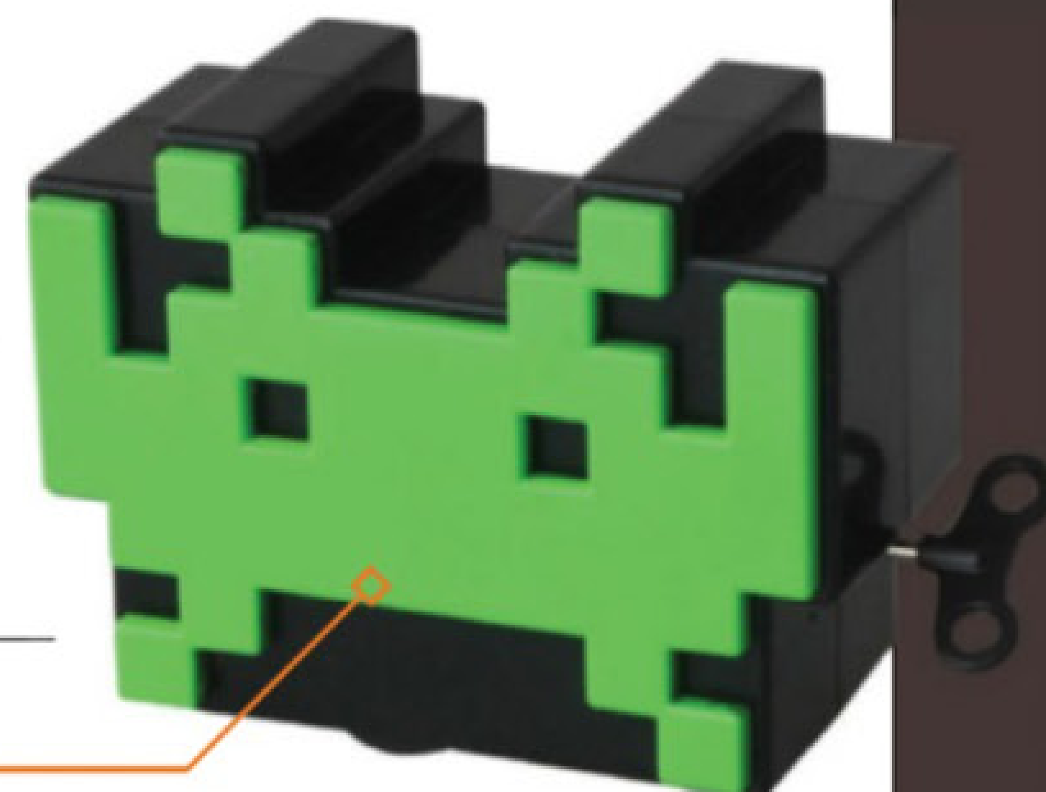
If you're a member of the FOX unit undertaking covert operations, wearing your affiliation big and bold on your chest might seem a little bit of a tactical error. It's not the kind of thing a stealth expert like Snake would do. Luckily, for us regular civilians this T-shirt simply looks quite nice and doesn't attract gunfire – though it might trigger alert status in fellow *Metal Gear* fans.

Price: £17.99
From: www.forbiddenplanet.co.uk

Space Invaders Wind-Ups

The *Space Invaders* merchandise train seems unstoppable, and this month we're quite taken with these colourful wind-up toys. Invader racing is one thing, but if you're feeling creative, why not set up an office invasion? Wind them up, set them running towards a colleague's desk and watch them scramble for a makeshift laser cannon.

Price: £6.99
From: www.funstock.co.uk





Neo Geo X

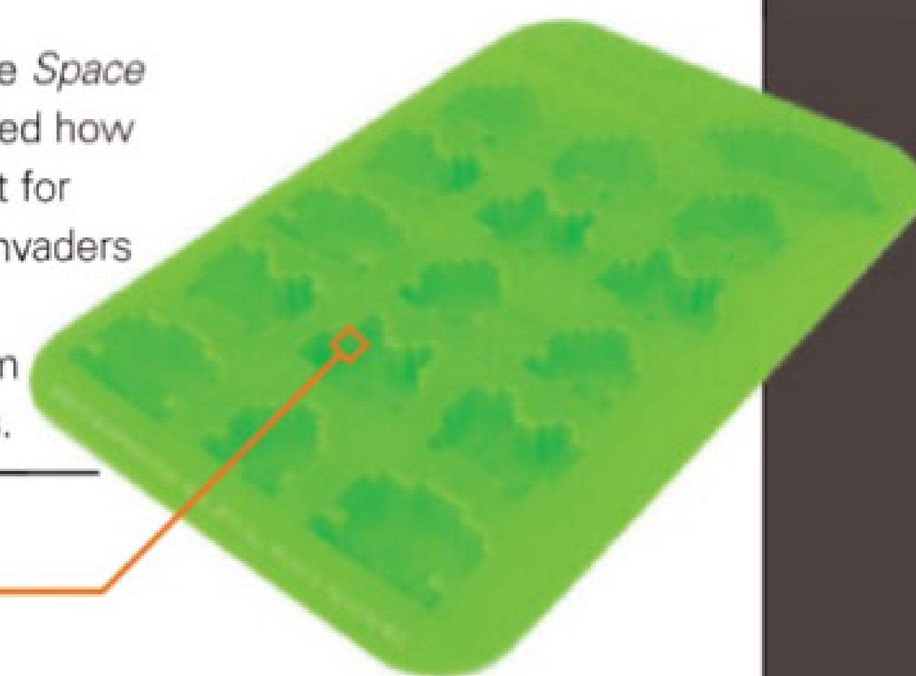
The Neo Geo X has improved quite a bit since we last looked at it in issue 116. While the emulation is still not 100 per cent accurate, it now works far better through HDMI thanks to an improved display and better sound (avoid using composite though). There's been big improvements made to it by the homebrew scene as well, making it compatible with numerous additional emulators. It also better value for money as it now includes the *Neo Geo Mega Pack*, which features 15 additional games, adding to the 20 already included.

Price: £124.99
From: www.funstock.co.uk

Space Invaders Ice Tray

You might be wondering why you need to make *Space Invaders* out of ice. So were we, until we realised how misguided we were. Apart from being excellent for cooling drinks as the summer rolls on, the ice invaders allow you to simulate an actual *Space Invaders* attack – simply hold a melting invader in a warm place and watch as it blasts the floor with drips.

Price: £7.99
From: www.funstock.co.uk



Retro Gamer Coasters

Erase annoying drink rings and get a blast of nostalgia at the same time with our awesome coasters. Available in packs of four, these tough durable coasters feature some of the best **Retro Gamer** covers we've ever produced, making them perfect for your loved ones.

Price: £4.99
From: www.imagineshop.co.uk





Here's my bio…
In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.

GAME OVER

Continue?



P.D

Hello, retro gamers. My name is **Paul Davies**. I used to be the editor of C&VG and have also worked on a number of classic gaming magazines over the years

There was a time, at the start of time where videogames are concerned, that being difficult was precisely the point. Old guys like me; we're used to being knocked down. Heck, it's what we expect. It's what we admire! Yet there is a difference between difficult and dastardly, and that is for sure.

I once had to explain to a guy, my boss in fact, that the reason *Yoshi's Story* looked so lovely and colourful on N64, with such lullaby music besides, was to sugar-coat its true purpose: to challenge your hand-eye coordination to within nanometres of an average person's patience. Gamers trained on *Mega Man*, *Rainbow Islands*, *Bubble Bobble* and early *Mario* understood this instinctively.

Most games from the Eighties and early Nineties are wolves in sheep's clothing. Or, um, cheerful cartoon dudes on missions that make the hardships of marine boot camp seem like a ride on a park swing.

Take Sega's *Carnival*: basically a jaunty fairground shoot-out with pretty flags, bunny rabbits, rubber ducks and owls to have a pop at. I forget exactly why I backed away ashen-faced, but I do remember thinking *Space Invaders* and *Galaxian* felt like a holiday afterwards. But *Carnival* was a coin-op. Its job was to take your coins. It was very good at its job, much better than *Gorf*, or you name it.

The part that I find most interesting about games moving on from those times is when the puppet-masters at Capcom and Namco etc started to look at characterisation. Sure, their intention was always to steal your money, but some of them wanted you to smile as your pockets gradually emptied. Others wanted to seriously intimidate.

Capcom's Red Arremer is perhaps my greatest nemesis. More than a cluster of pixels, Red Arremer was such a f***ing bastard standing between me and the next beautiful location in my *Ghouls 'N' Ghosts* adventures. I have boycotted the little guy's solo career out of principle for all the misery he caused me. Yes, *Gargoyle's Quest* can rot in hell.

Years before that, the final Space Invader, who was so surprisingly pesky with his new turn of pace, was really kind of cute. He was just a thing, but you could imagine that determination to complete his mission at a speed hopefully beyond the fingers of a dull-witted human. Space Invader, Oscar Mike. He was tricky but not frustrating because he wasn't getting in the way of anything other than a high score. Everybody knew what was coming next… the exact same thing as last time!

My most enjoyable difficult gaming moments have been those during which I've been yelling the house down too. The 'Terminator' twins in *Super Contra* pushing me to scurry and wall-hang for dear life before the entire back wall is torn apart – completely unexpectedly – by a giant fire-breathing robot. I seriously think Konami designers were trying to induce heart attacks in their prime.

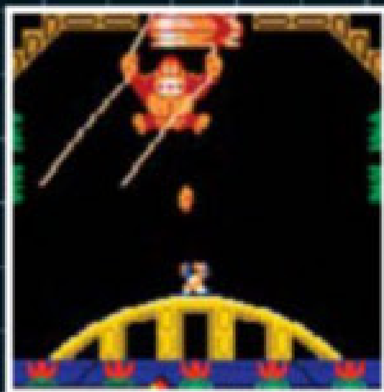
It probably says a lot about me that I still thoroughly enjoy being 'schooled' by the best videogames. It's like staring down the devil himself, face to face through the bulletproof glass of a high-security prison's visitation booth. Actually, it's true that the very best examples of difficult games only point at our own personal ineptitude. Giant Bullet Bill still surprises me to this day! *



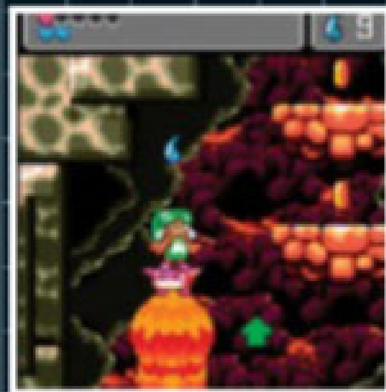
retrodiary

23 May – 19 June

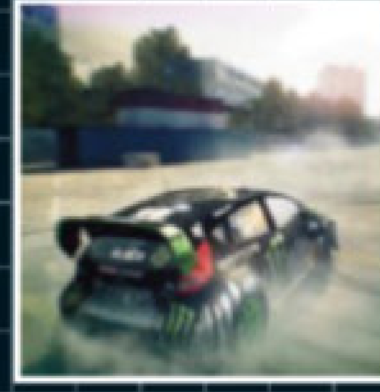
>> A month of retro events both past and present



23 May 2005
■ Nintendo's puzzler game *WarioWare: Twisted!* is released on the Game Boy Advance handheld.

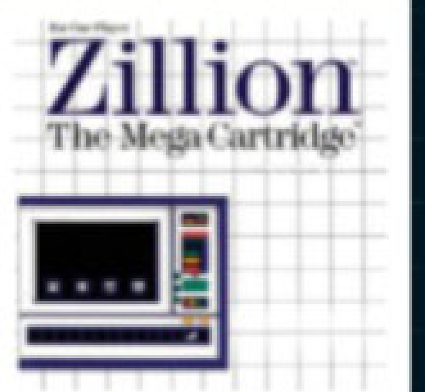


23 May 2012
■ Sega releases its adventurous platformer *Monster World IV* on PS3 in Europe.



24 May 2011
■ Codemasters releases *Dirt 3*, the rally racing game, on the PlayStation 3 and Xbox 360.

27 May 1987
■ Sega releases its platform adventure game *Zillion* on its Master System console.





27 May 2005
■ The racing game *Need For Speed: Underground 2* is released in the UK on the Nintendo DS.



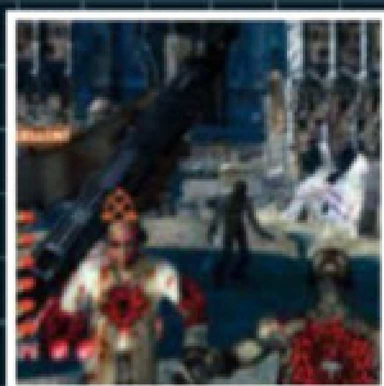
28 May 1982
■ Nintendo released its multi-screen Game & Watch favourite *Oil Panic*.



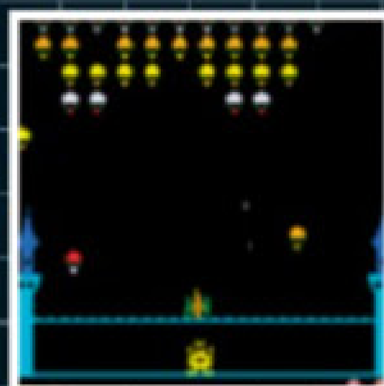
30 May 2014
■ Nintendo's hugely popular racing game franchise continues with *Mario Kart 8* for the Wii U hitting the shops of Europe.



1 June 1984
■ *Brain Strainers* is released on the ColecoVision exclusively in the USA. The music videogame played similar to the electronic game *Simon*.



1 June 2002
■ Sega's light gun based arcade coin-op *The House Of The Dead III* is released.



2 June 1980
■ Namco releases its fixed shooter coin-op game *King And Balloon*.



6 June 1993
■ *The Legend Of Zelda: Link's Awakening* is released on Nintendo's Game Boy initially in Japan.



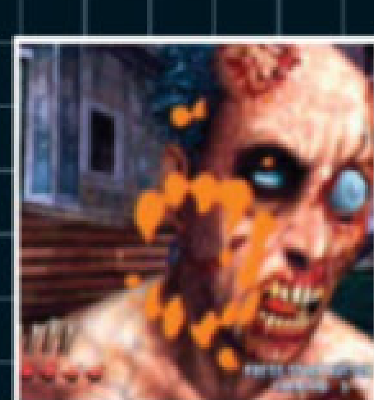
7 June 2013
■ The marvellous adventure game *Journey*, developed by thatgamecompany, is belatedly released on the PlayStation 3 across Europe.



8 June 1990
■ Technosoft releases its superb rendition of the scrolling shooter *Thunder Force III* on the Sega Genesis/Mega Drive starting in Japan.



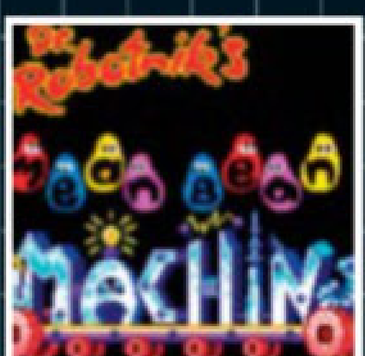
9 June 1989
■ *Golden Axe* swings its way into arcades thanks to Sega.



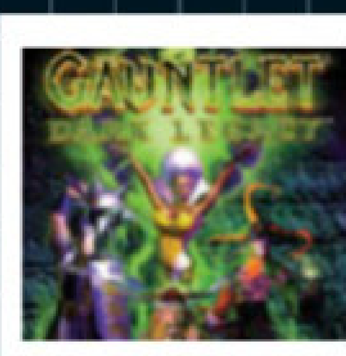
9 June 2000
■ Beat-'em-up meets shooter with Sega's release of *Zombie Revenge* on Dreamcast.



10-12 June 2014
■ The Electronic Entertainment Expo (E3) is to be held, once again, at the Los Angeles Convention Centre.



13 June 2013
■ *Dr Robotnik's Mean Bean Machine* becomes available to Nintendo 3DS handheld console owners via the Virtual Console.



15 June 2001
■ *Gauntlet: Dark Legacy* is released on the PlayStation 2 in Europe. It wasn't great…



18 June 2004
■ *Mario Golf: Toadstool Tour* is released in Europe on Nintendo's GameCube.



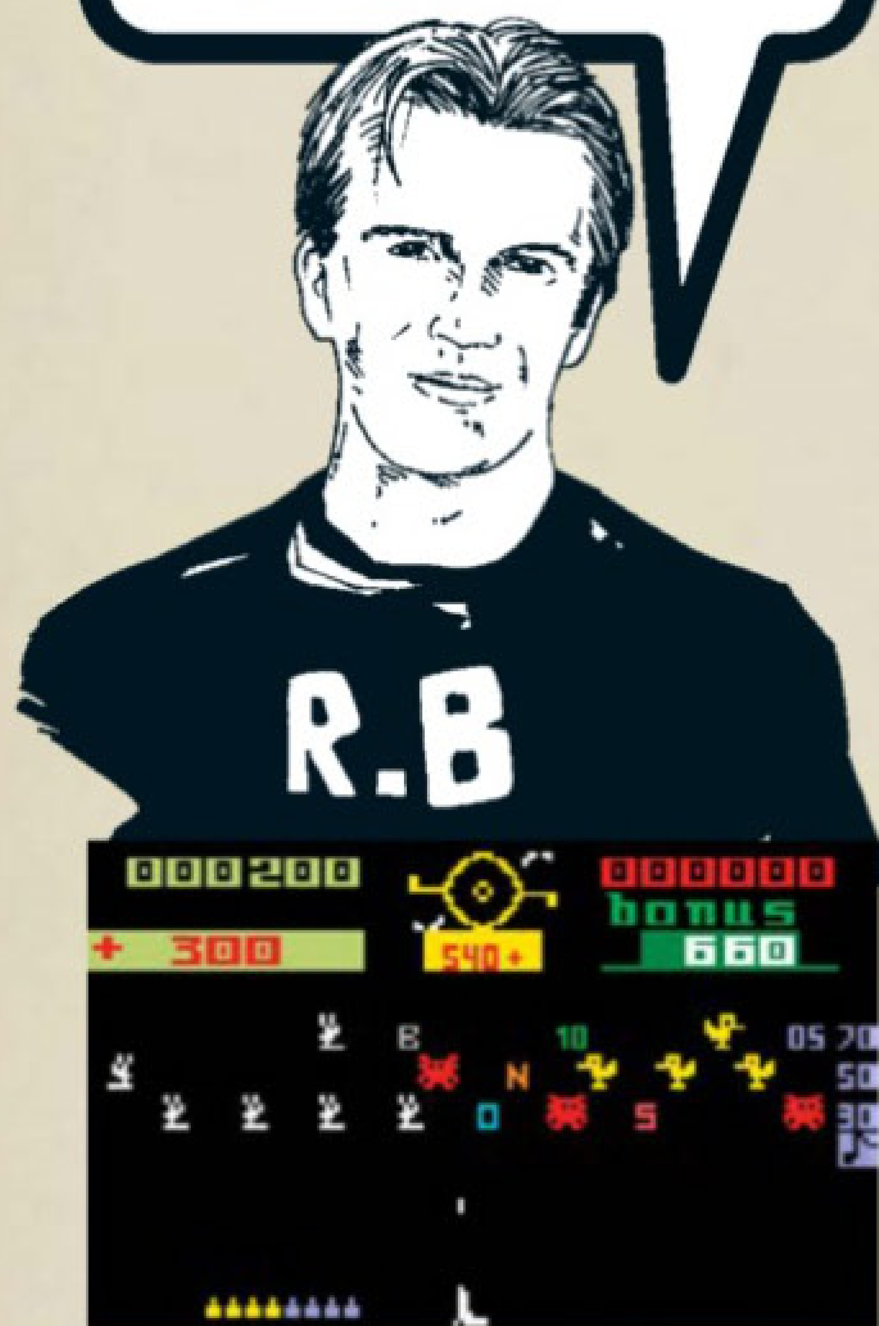
19 June 2014
■ New issue of **Retro Gamer** hits the streets.

BACK TO THE EIGHTIES

THE LATEST NEWS FROM AUGUST 1980



AUGUST 1980 – Polaris launches, Space Encounters flies in, Circus Atari plays for laughs, Steeplechase doesn't fall at first and Invader From Space lands. Richard Burton dons industrial ear protectors for a quick game…



» [Intellivision] Shoot the animals, collect the bonuses and hit the extra ammo in this colourful shooting game.

Taito released *Polaris*, a single-screen fixed shoot-'em-up which saw you control a nuclear submarine that had to stop attacks from enemy aircraft and boats. They fired missiles and dropped mines and depth charges in their relentless pursuit of you.

You could only shoot upwards and needed to clear each level of the bombers before progressing to the next. While not Taito's finest coin-op hour, *Polaris* was fun in the short-term, playing a lot like an aquatic version of *Space Invaders*.

For a more conventional shooter set in the vast bleak vacuum of inky black space, why not try *Space Cyclone*? It followed the well-trod path of shooting swathes of invading aliens before they progressed down the screen toward you. In an interesting twist, if three of these aliens managed to get to the bottom of the screen they constructed a larger more powerful spaceship which could then fire a devastating cyclone beam at you. Unfortunately, that twist aside, the game was dull and generic and it came as no surprise that *Space Cyclone* barely registered any interest anywhere outside of the production team.

Midway, on the other hand, appeared to have an idea on how to mix things up a bit in shoot-'em-up coin-op land. Its new game, *Space Encounters*, had an interesting pseudo-3D appearance as you flew down the trenches of a space station while taking out the ever-increasing alien threat as you went.

While *Space Encounters* leant heavily on the *Star Wars* Death Star trench run scene for its basic premise, the game was executed well. It was graphically simplistic but the 3D was effective with enough playability to warrant perseverance. The graphics were monochrome with a smidge of colour introduced by means of a coloured plastic overlay on the screen.

Elsewhere, *Red Tank* was the latest arcade offering from Sigma. It played like a cross between *Pac-Man* and one of the tank games from the Atari 2600 *Combat* cartridge.

Your yellow tank had to pick up dots that were handily turned into shells to shoot at your computerised opponent, the red tank. Once all the dots were collected the difficulty level cranked up a notch. The red tank could also collect the dots and regurgitate them into land mines.



» [Atari 2600] Horse racing for up to four players sounds dull. For one player yes, for four players it's a blast.

THIS MONTH IN…

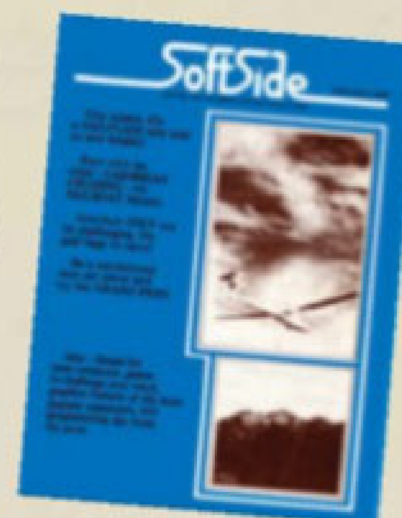
COIN CONNECTION

Atari has already introduced the smaller-sized arcade cabinet, the cabaret, for smaller premises to get coin-op machines on site when space dictated otherwise previously. *Missile Command* was now the second game to be given the cabaret makeover after the resounding success of its *Asteroids* cabaret-sized machine.



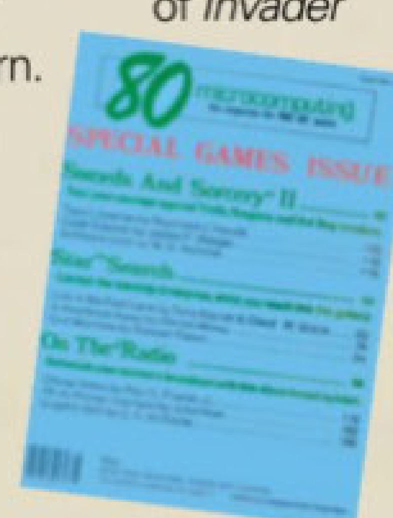
SOFTSIDE

So you're a fashion conscious gamer with an eye for a nice timepiece. The new Casio calculator digital watch could be yours for just $49.99. Or you could wait for a couple of years and get it free when you bought Cascade's compilation of rubbish games, *Cassette 50*.



80 MICROCOMPUTING

Dubbed the 'Special Games Issue', the TRS-80 publication promised much. Type-ins aside, it was devoid of games apart from a review of *Invader From Space* by Acorn. Not to be confused with this month's game release by Epoch, the TRS-80 game was another mediocre *Space Invaders* game.



CHARTS

AUGUST 1980

ARCADE



1	Missile Command (Atari)
2	Asteroids (Atari)
3	Galaxian (Midway)
4	Space Invaders Part II (Midway)
5	Space Invaders (Midway)

ATARI 2600



1	Superman (Atari)
2	Championship Soccer (Atari)
3	Canyon Bomber (Atari)
4	Circus Atari (Atari)
5	Sky Diver (Atari)

TANDY TRS-80



1	Temple Of Apshai (AS)
2	Adventure (Microsoft)
3	Datestones Of Ryn (AS)
4	Star Trek (Adventure International)
5	Android Nim (SoftSide)

MUSIC



1	Winner Takes It All (Abba)
2	Ashes To Ashes (David Bowie)
3	Start (Jam)
4	Upside Down (Diana Ross)
5	9 To 5 (Sheena Easton)

While *Red Tank* played like an Atari 2600 game, there were two new releases for the faux wooden-fronted home system. First up was *Circus Atari* from Atari in which you controlled a see-saw that propelled a reckless clown skyward toward rows of horizontally-scrolling balloons with the hope of popping a few of them before falling back down to the see-saw again.

If that sounds like a *Breakout* clone smeared in face paint and donning a squirty bow tie then you would be correct. Similarly, if you think it sounds pretty dire and not much fun to play you would most certainly be wrong. Despite the glaringly obvious graphical limitations of the console, *Circus Atari* was a lovely offering.

There was further Atari 2600 cartridge action to be seen this month with the release of *Steeplechase*. Developed by Atari, it was one of three exclusively designed games for release on Sears' Tele-Games label and would only be available to buy through Sears stores.

The game itself was, usurprisingly, a horse racing game featuring four horses with plenty of fences to jump. The real playability came from the simultaneous four-player challenge. It also made use of the underused paddle controllers rather than the wrist-breakingly stiff Atari joysticks. *Steeplechase* originally started out life as a 1975 Atari coin-op game that was virtually identical except for having a six-player mode.



» [Atari 2600] *Circus Atari* was a *Breakout* clone involving bouncing clowns off a seesaw. Strange but fun.

Sega's recently released arcade game *Carnival* made the relatively quick jump to the Intellivision console this month. The fixed shooter would see you attempt to shoot down ducks, rabbits and owls as they moved across the screen in the style of a fairground shooting range. Once the targets had been cleared, you receive a bonus for bullets remaining and were introduced to what was arguably the first bonus round in videogames, a level where you got to shoot a bear for extra points.

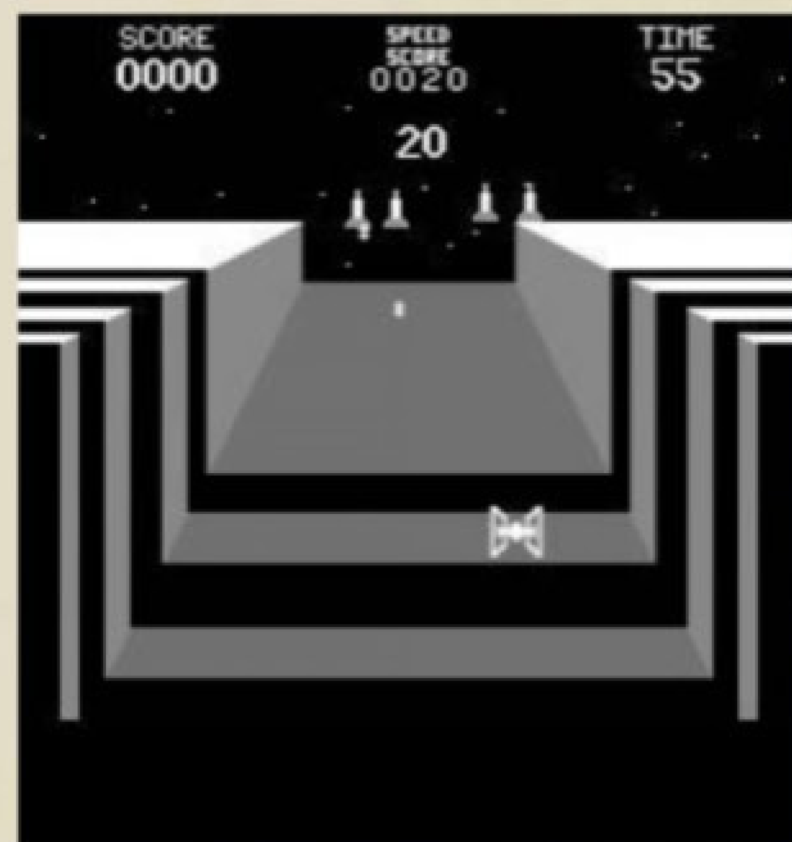
Letters that spelled out bonus could also be shot to gain bonus points and the game ended when you ran out of ammunition. However, extra packs of five and ten bullets could be shot and added to your ammo pile as they appeared intermingled between the various animal targets.

Carnival proved to be popular in the arcades and the Intellivision port was also very well received by arcade-goers. Such was its success that later ports to the Atari 2600 and ColecoVision followed.

New out this month was *Invader From Space*, a handheld electronic game from Epoch. The chunky, white-cased *Space Invaders* clone was also licensed to *Grandstand* in the UK and was classed as a handheld rather than a tabletop game. If you had gargantuan claw-like hands with a thumb like a steel girder to use the control stick then you probably would've been fine…

The game itself was simple, bog-standard *Space Invaders* clone. The sprites were colourful but only by means of a tinted plastic overlay. It played great and annoyed everyone within a two-mile radius such was the volume of the beeps emanating from its plastic innards.

That said, it looked like something Spock from *Star Trek* would survey a planet with. Yet it was still portable videogaming and what more could a young schoolboy/girl want in the early Eighties? ★



» [Arcade] *Space Encounters* bore a remarkable resemblance to a certain Death Star scene.



» [Arcade] *Space Invaders* meets submarines in Taito's *Polaris* coin-op released this month.

AUGUST WORLD NEWS

17 August saw the disappearance of Azaria Chamberlain, a two-month-old baby girl. She had been with her family as they camped near Ayers Rock in Australia before being reportedly taken from the family tent by a dingo.

Her body was never found and the parents, Lindy and Michael Chamberlain, were suspected of murder. They were tried and found guilty with Lindy sentenced to life imprisonment.

In 1986 a piece of clothing was discovered next to Ayers Rock and was found to be a piece of the matinee jacket worn by Azaria. The jacket had never been recovered and was the missing piece of evidence needed to exonerate the couple.

Complex legal wrangling continued for many years until, after several inquests, on 12 June 2012 the coroner ruled that a dingo had been responsible for Azaria's death.

24 August saw the sad passing of actress Yootha Joyce who was most fondly remembered for her role opposite Brian Murphy in the popular Seventies sitcom, *George & Mildred*.

It was a good month for LP releases with *One Trick Pony* (Paul Simon), *Kaleidoscope* (Siouxsie & The Banshees), *Drama* (Yes), *Wild Cat* (Tygers Of Pang Tang) and *Panorama* (The Cars) all being released during August.

15 August saw the premiere of the movie *McVicar* starring Roger Daltrey in the title role as the armed robber who was dubbed by Scotland Yard as "Public Enemy Number One" and who later became a noted journalist and writer.

BACK TO THE NINETIES

THE LATEST NEWS FROM APRIL 1997

APRIL 1997 – Apple Bandai Pippin rots, Nintendo 64 expands, The City Of Lost Children gets lost, Oddworld is great, Sega takes Ages again, Metal Slug blasts onto the Saturn while Elevator Action Returns. Richard Burton gets stuck between floors…



Oddest console release news of the year so far was that Bandai planned to release its wholly unsuccessful Apple Bandai Pippin system in Europe this month.

On paper Bandai's machine promised much, targeting gamers who wanted to play online and wanted to utilise its multimedia options. While the hardware itself was a solid piece of kit, it was the woefully lacking software base that destined the Pippin to the history books as one of the worst consoles ever.

Since its Japanese release in 1995 the Pippin could only muster approximately 80 software releases including games, utilities and applications. US releases were even more pitiful with just 18 titles released since the American launch.

Bandai had reportedly stockpiled over 100,000 units of the machine in readiness for the European release. Worldwide sales eventually stopped at 42,000 and by the end of 1997 the Bandai Pippin was discontinued.

There was an update from Nintendo on its proposed 64DD peripheral for the Nintendo 64 console. The new add-on would attach to the N64 giving it oodles of memory expansion and a UK version was also to be made available in time.

New games could be downloaded via Randnet, an online gaming service, which allowed access to games demos, online competitive gaming and internet access. New expanded games would also be planned.

Once again software support was less than impressive with just ten titles being made exclusively for the 64DD. Developers bailed and projects were hastily scrapped.

The 64DD had been in Nintendo's plans since 1995 and after numerous delays it was belatedly launched in Japan on December 1999. By then the popularity of the N64 was beginning to diminish and the 64DD just wasn't a purchase N64 owners needed to make. Japanese sales of the unit were poor and the decision was made for the European and US versions to be cancelled. The $399 price tag probably hadn't helped.

Released this month was an unusual movie tie-in game, *The City Of Lost Children*, a 3D adventure from Psygnosis for PC and PlayStation. The critically acclaimed French movie, released in 1995, was a beautiful and atmospheric story following Miette, an orphan girl who discovers that children are being stolen from the city and placed on a nearby oil rig to have their dreams removed.

APRIL WORLD NEWS

1 April saw the perihelion, or closest approach to the sun, of the spectacular Comet Hale-Bopp. It had been a feature in the sky for several months but during the early months of 1997 it became brighter becoming a very noticeable feature in the night sky even with the naked eye in a light polluted city. It remained visible for just over 18 months.

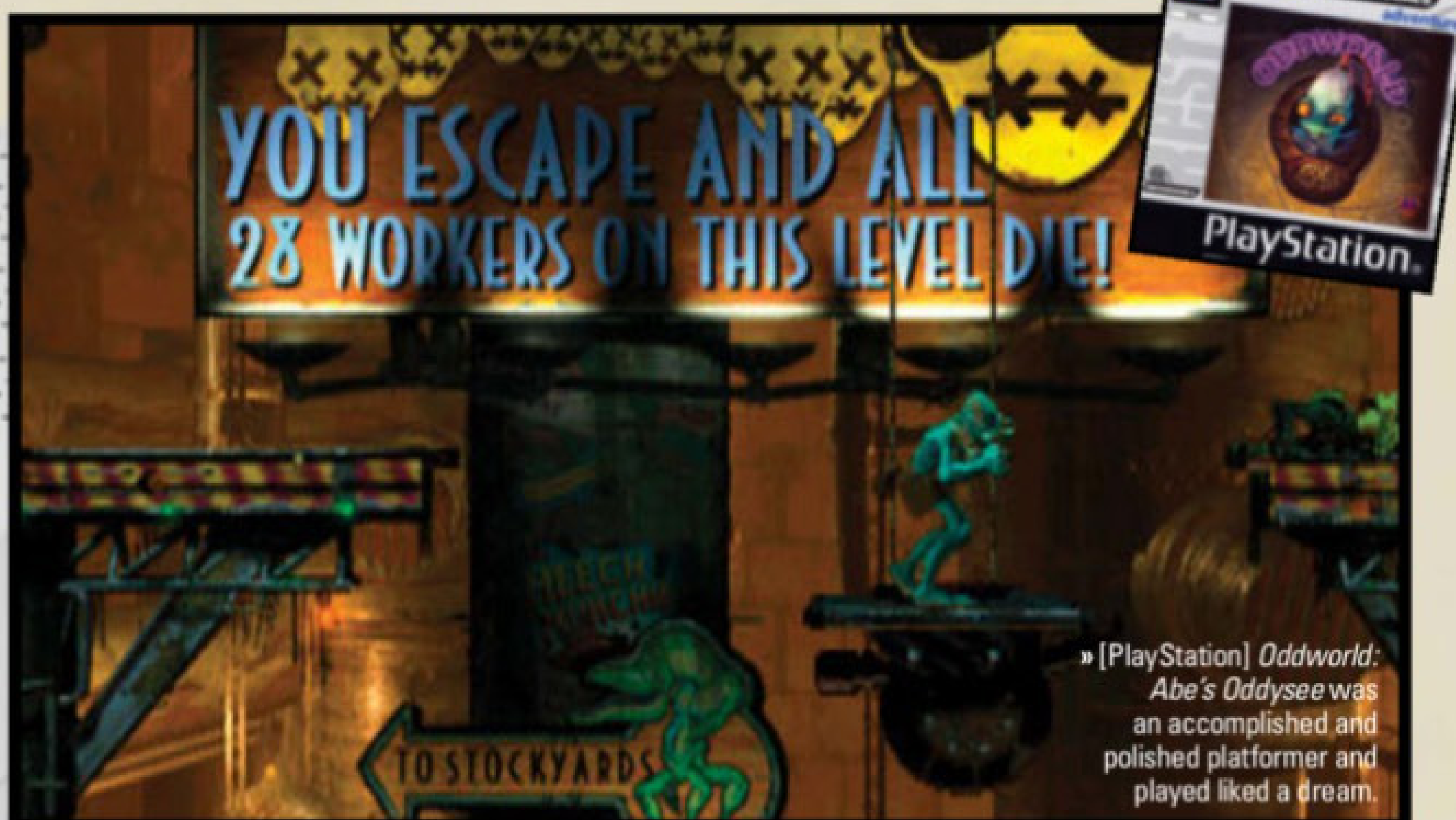
7 April saw the expected running of the 150th Aintree Grand National, the world-famous horse race. An hour before the race was due to start two bomb threats were made using IRA code words. An evacuation of 60,000 people and postponement of the race followed. It was run two days later on the Monday with Lord Gyllene winning by 25 lengths.

15 April saw teen rock/pop band Hanson release their debut single *MMMBop*. It became an instant hit attaining the number one position in 27 countries. The catchy yet sugary sweet tune went from being a fun summer song to a reviled annoyance due to being massively overplayed on radio stations.

21 April saw the first instances of burials in space when 24 samples were loaded onto a Pegasus rocket and sent into Earth orbit. The mission was called Celestis and contained remains of Krafft Ehricke and Gerard K O'Neill, a noted rocket scientist and space physicist respectively, as well as Gene Roddenberry, creator of the television series *Star Trek*.




» The Bandai Pippin failed on just about every level and remains one of the most ill-conceived consoles ever.



» [PlayStation] *Oddworld: Abe's Oddysee* was an accomplished and polished platformer and played liked a dream.


» [Saturn] A fantastic sequel that boasted stunning animation and plenty of over-the-top explosions.


» [Saturn] Sega delved into its coin-op back catalogue to produce another compilation.


» The 64DD was an expansion module for the Nintendo 64. Released in Japan, it flopped and proposed releases elsewhere were pulled.

The game followed the movie premise closely and retained its fantasy steampunk feel. It had some lovely pre-rendered backgrounds, great graphics, digitised sound lifted directly from the movie and the immersive atmosphere to match, yet it somehow managed to miss the mark in gameplay terms. The character movement was painfully slow and the gameplay progressed at such a lethargic pace that frustration soon set in and when you did persevere with it, you soon found it could be completed very quickly.

Nearing completion was another PC and PlayStation game, *Oddworld: Abe's Oddysee*, a platform game with adventure elements developed by GT Interactive. Early previews looked pretty promising with some nicely designed graphics laid on more pre-rendered backgrounds.

Thankfully gameplay didn't disappoint when it was released. Players controlled Abe, an enslaved meat factory worker who finds out that the tasty yet mysterious new meat they are producing is actually his own alien race. Abe makes a break for it after making the discovery and tries to release his fellow workers while making good his escape.

Abe's Oddysee was very well received upon its release, with its very testing puzzle elements dovetailing nicely with the crisply designed graphics. It sold extremely well and looked set to become a classic on the original PlayStation.

Sega was keen to take advantage of the growing interest in videogames of yesteryear following the surprising success of its *Sega Ages* collection containing some of its best-loved arcade favourites from the Eighties.

So Sega decided it would cobble together another set of games for the morbidly titled *Sega Ages Memorial Collection Volume 1* exclusively for its Saturn console with a relatively strong line-up of *Up'N Down, Pengo, Head On* and the classic platformer *Flicky*.

A second volume was also being planned for later in the year, this time with six games; *Star Jacker, Sinbad Mystery, The Ninja, Monaco GP, Samurai* and *Penguin Land*. More games but arguably not as strong a line-up as the first volume. Despite strong sales on the *Sega Ages Memorial Collection Volume 1*, it disappointingly never made it outside of Japan. Unfortunately neither did *Volume 2…*

Another great Sega Saturn coin-op conversion that remained a Japan-only release was SNK's *Metal Slug*. The seminal run-and-gun that was heavy on artillery and caked in humour was out this month and was as playable and as fun as the coin-op original. However, it was re-released shortly afterward once several bug fixes had been implemented.

Completing a trio of non-European Saturn releases was a sequel to an arcade favourite from 1983 and a popular cross-format home computer game. *Elevator Action Returns* saw a return to the familiar 2D scrolling platform action world of the original, albeit it was multi-directional this time around.

The game saw your team attempting to foil a terrorist plot to nuke various targets spread across six large levels. You had to locate the secret data spread throughout these levels and use the information to disarm the bombs. At game start you also had a choice of three different characters to play, all with varying abilities.

Elevator Action Returns was a superb update that offered fanastic animation, slick level design and plenty of blasting action. It did get a North American release, going under the name *Elevator Action 2*, but the UK once again missed out on it. We're still really upset about it. *


» [PC] *The City Of Lost Children* was a great movie. The game promised much but, despite looking great, it lacked playability.

CHARTS

APRIL 1997

PLAYSTATION
1 Cool Boarders (Sony)
2 Destruction Derby 2 (Psygnosis)
3 Tomb Raider (Eidos)
4 Victory Boxing (Virgin Games)
5 Die Hard Trilogy (Electronic Arts)

PC
1 Command & Conquer: Red Alert (Virgin Games)
2 Tomb Raider (Eidos)
3 Simpsons Cartoon Studio (Electronic Arts)
4 Championship Manager 2 Double Pack (Eidos)
5 Diablo (Zablac)

SEGA SATURN
1 Dark Savior (Sega)
2 Die Hard Arcade (Sega)
3 Sega Ages Volume 1 (Sega)
4 Sonic 3D (Sega)
5 Tomb Raider (Eidos)

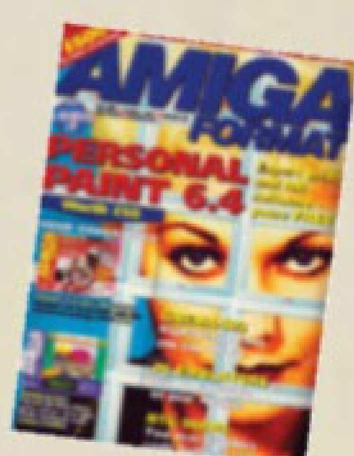
MUSIC
1 I Believe I Can Fly (R Kelly)
2 Bellissima (DJ Quicksilver)
3 Don't Speak (No Doubt)
4 Blood On The Dancefloor (Michael Jackson)
5 Richard III (Supergrass)

Hardware images © Evan-Amos

THIS MONTH IN…

AMIGA FORMAT

AF reported that Silica Shop, vendor of all things Amiga, had gone bust again. Having been rescued by Anglo Corporation a year prior after the demise of Commodore, Silica Shop pressed ahead by attempting to make headway in the competitive PC market. It struggled, and finally succumbed to bankruptcy.



COMPUTER & VIDEOGAMES

C&VG celebrated the forthcoming 20th anniversary of *Star Wars* with a look the history of officially licensed *Star Wars* videogames. The first was released in 1982 by Parker Brothers for the Atari 2600 and was the splendid *Star Wars: The Empire Strikes Back* featuring the AT-AT walker battles on Hoth.



CU AMIGA

Not a month goes by without a Top 50 Best Games Ever list published somewhere. This month was the Amiga's turn with its top three being; *Monkey Island 2: LeChuck's Revenge* (Lucasfilm Games), *Sensible World Of Soccer* (Sensible Software) and in top spot was *Worms: The Director's Cut* (Team 17/ Ocean). Really?



retro GAMER.net READER'S REVIVAL

SCORE 15

Blitz

NOW THAT'S HOW YOU LAND A PLANE!

#75

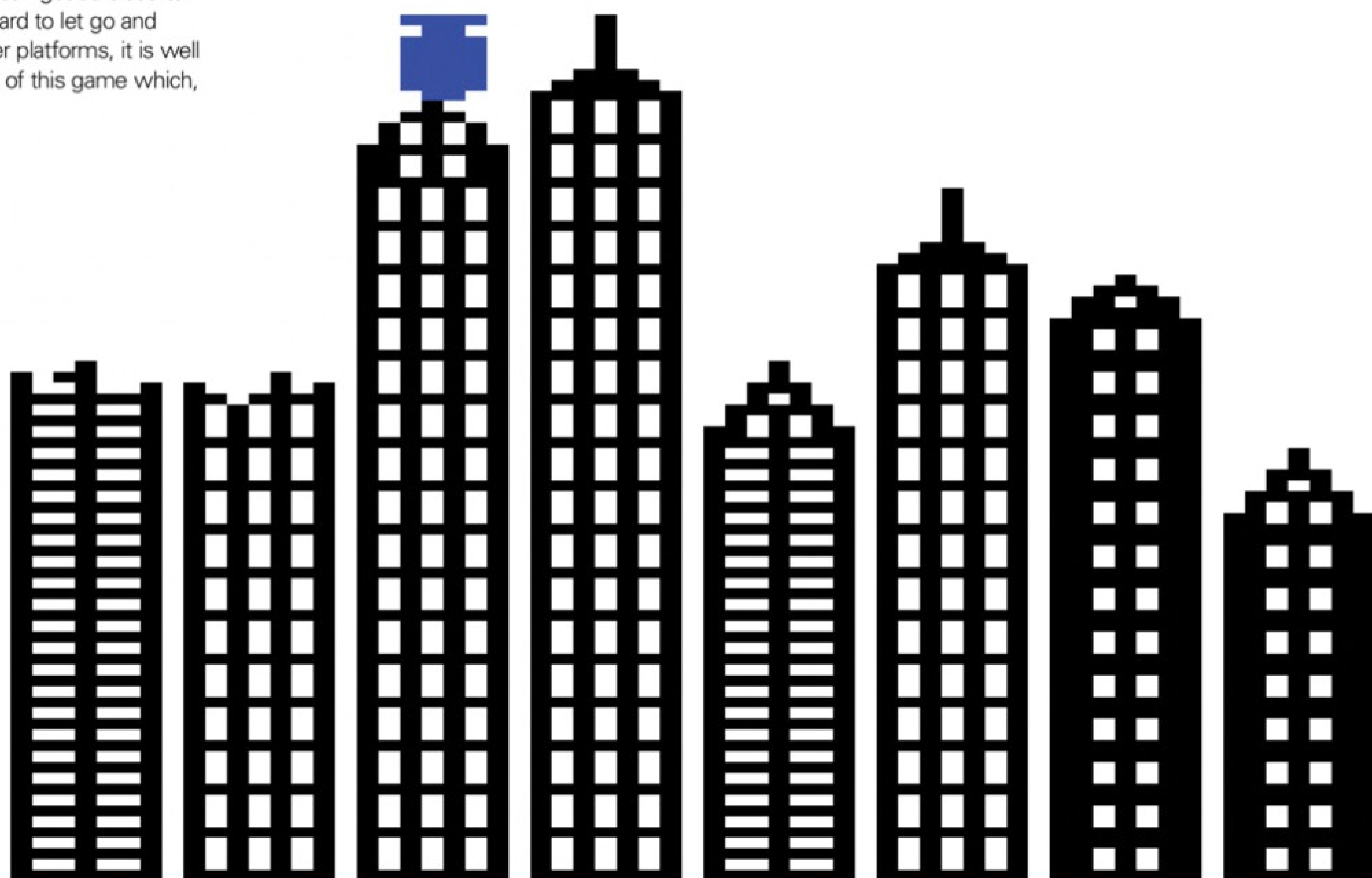
» COMMODORE » VIC-20 » 1982

***Blitz* is an incredibly simple and remarkably addictive game where your goal is to land your biplane.** Unfortunately the airport is full, closed or too far away and so you decide to land in the city. To do so you've got to clear away those pesky skyscrapers which otherwise cause crashing problems for your little biplane. Not very PC to bomb a city but for a computer game that's not important – besides we can assume the city was populated by evil zombies.

You biplane starts at the top of the screen and flies left to right. Each time it leaves the right of the screen it emerges back on the left but slightly lower down. As you pass over the city below, you can drop bombs. A direct hit with a building will take a few stories off the top of it. Do this to all the buildings until they are completely destroyed and your biplane can land, with the reward being an animated waving man followed by the biplane taking off into the sky for another round.

Blitz is a game of chance as much a game of skill due to the randomly generated city landscape you are given at the start of every game. However that doesn't matter because you just have to beat it. You can get so close to clearing the city sometimes and it's hard to let go and give up. Although it came out on other platforms, it is well worth seeking out the VIC-20 version of this game which, in my opinion, is the best one. *

ANDY H









A MOMENT WITH...

Ian Malcolm

Every issue, we put an industry veteran in the hotseat. This month, Retro Gamer touched base with Ian Malcolm, a former lead designer for Australian developer Melbourne House





Who is Ian Malcolm?

Ian Malcolm worked his way up from QA and design work at Beam Software to become the lead designer at what turned into Infogrames Melbourne House, in a gaming career that spanned 15 years. During that time he worked on an assortment of licensed console games including *Nightshade*, *Star Wars* and *The Hunt For Red October* on the NES, *Radical Rex* and *True Lies* for the SNES and Mega Drive and the *KKND: Krush, Kill 'N Destroy* series for the PC. He also worked on the Dreamcast and, for two years between 2008 and 2010, worked on iOS titles, among them *Need For Speed: Undercover* and *The Sims 3*.



» Ian Malcolm started work at Beam Software, which later became Melbourne House.

Which of your own games would you recommend to our readership and why?

Looney Tunes Space Race on Dreamcast: one of the earliest examples of cel-shaded 3D. The characters and environments looked gorgeous, the coders absolutely nailed the controls, the track designs and general game flow work well, and at the end of the day it's still both fun and funny to play.

What is your proudest memory?

Seeing my name in the *Star Wars* (NES) manual at the age of 24! Partly for the connection with a personal touchstone, but mainly because when I joined the project mid-development it was not in great shape, and I had a 'sink or swim' opportunity to turn it around, redoing all the level designs and control tuning from scratch.

What's the most difficult thing you've encountered while working on a game?

'Design by committee' was a recurring issue which contributed to a multitude of development sins, particularly when it involved dramatically shifting creative direction multiple times mid-production due to changing trends or just the whims of those more senior. Decent projects cancelled for external reasons beyond the team's control were also less than fun.

Which industry veteran do you most admire?

Tim Schafer, for creating such a diverse body of work while still bringing his recognisable 'touch' to each, regardless of genre or style. *Full Throttle* was hilarious, but then *Grim Fandango* just knocked it out of the park – just such a brilliant artistic direction to take for a big budget title, and he absolutely nailed it.



[SNES] *True Lies* was one of the many licensed games Malcolm worked on.

How would you like your games to be remembered?

I guess at this point I'm just happy if they're remembered at all, and if they brought some enjoyment and laughs along the way. Funnily enough, a barista I get coffee from here in Melbourne turned out to be a huge *Space Race* fan, but what made that special was that he was Venezuelan and had originally played it there.

Which game do you wish you'd made and why?

It has to be *The Legend Of Zelda: The Wind Waker*. I always loved the light-hearted yet epic feel. Shifting the action onto the ocean created a seemingly limitless potential for exploration that I would have dearly loved to work with. People talk about the moment they first stepped onto Hyrule Field, but for me getting onto the open sea in *Wind Waker* was Hyrule Field x100.

What opportunities has making videogames given you?

The opportunity to meet and work with talented people from many disciplines, travel the world, hang around Hollywood movie sets to shoot visual reference, attend hotel rooftop parties during the madness that was E3 in the 'old days'.

What's your darkest memory of being in the games industry?

The spread of 'crunch time' culture. I worked a handful of late nights and weekends when it was necessary toward the end of a few projects but, over time, crunch time became the norm for almost any milestone.

And your best?

The people I worked with. Truly the most funny, creative, talented and eclectic bunch of individuals you could ever hope to spend time with. Some are still among my closest friends, even though we're now all scattered across the country and the world.

Can you share one interesting anecdote about your time in the games industry?

I was supposed to fly to LA to direct character dialogue recording for *Men In Black II* and picked up my producer in the taxi on the way to the airport. Only when we checked in did he inform me we were going to a studio in San Jose instead of LA, for last-minute budgetary reasons. There was something very surreal about travelling to the other side of the world to spend four days recording dialogue with Will Smith and Tommy Lee-Jones soundalikes in a converted garage literally in the recording engineer's suburban backyard.

How has the industry changed over the last 20 years?

The key shift for me was going from small dev teams of three to six people to teams of 50+ on multi-million dollar projects. Having said that, while those huge teams and budgets are still there in the mainstream, it's also been interesting to watch the return of the small team/bedroom developer via things like iOS. *

The Bluffer's guide to

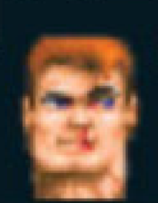
MAZE GAMES

It's amazing how far the maze goes back as an interactive gaming environment, let alone the fact that it inspired the modern first-person shooter as we know it. Equipped with a giant ball of yarn, Mike Bevan enters the labyrinth of maze game history

THE AMAZING MAZE GAME

MAZE WAR

WOLFENSTEIN 3D



GOTCHA



TROG

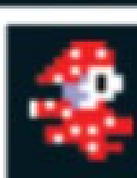
ADVENTURE



PENGO

HEAD ON

MR DO!





MOUSE TRAP

ZE
H S

WIZARD OF WOR

RALLY-X

COLOSSAL CAVE

3D MONSTER MAZE

BOMBERMAN

LADY BUG

BERZERK

MAZIACS

AMIDAR

PAC-MAN

ROGUE

GAUNTLET

Bluffer's guide

KNOW YOUR MAZE GAMES

PUZZLE MAZE
■ A maze game where players must simply find a route to the exit, as in *The Amazing Maze Game* or the Master System's *Snail Maze*.

MAZE CHASE
■ A common theme of many arcade games, like *Pac-Man* and *Crystal Castles*, where players collect items while being pursued by monsters.

MAZE SHOOTER
■ Also known as 'corridor shooters', these usually feature top-down maze environments, equipping you with a handy weapon to defend yourself.

SCROLLING MAZE
■ A game where only a portion of the maze layout is shown on screen, which scrolls as the player moves. Examples include *Gauntlet* and *Rally X*.

PROGRESSIVE MAZE
■ Some maze games allow the player to change their layout as they progress, such as tunnelling in *Mr Do!*, or spinning gates in *Lady Bug*.

GRID CAPTURE MAZE
■ A maze sub-genre where the object is to get your character to encircle portions of the screen, often filling them with colour, as in *Amidar*.

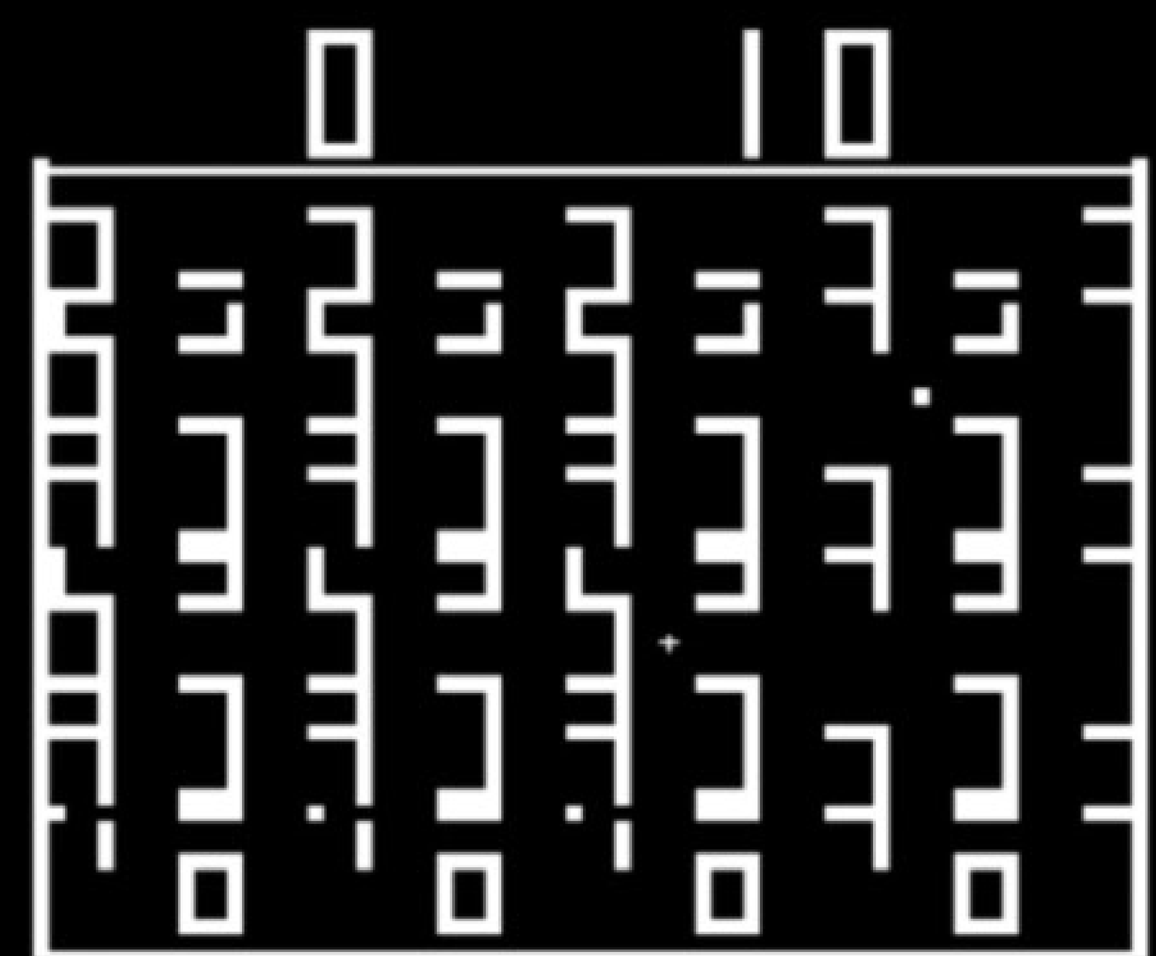
3D MAZE
■ Developers soon learned how to put gamers into mazes rendered in three dimensions on-screen, along with the occasional T-Rex…

MAZE ADVENTURE
■ From simple text games like *Colossal Cave* to 3D titles like *Dungeon Master*, mazes have been long associated with adventure games.

The maze. It's an enigmatic construct that's been popping up in various aspects of human culture for thousands of years, from ancient legends to stately homes and modern movie blockbusters, along with the occasional crop circle in Wiltshire. The Greeks told of one beneath the palace of King Minos with a scary bull monster, while William III had a famous one built out of shrubbery at Hampton Court. More recently, David Bowie ruled over one full of Muppets, and Harry Potter pootled around one on a quest for the Goblet of Fire.

There's certainly something about their labyrinthine complexity that fires the imagination, even when presented by the simple line of text; "You are in a maze of twisty little passages, all alike," a much-quoted location description from Will Crowther's *Colossal Cave Adventure*. The original version of *Colossal Cave* was written for the PDP-10 mainframe computer in 1975. A keen amateur caver, Crowther based his program on his exploration map of the Mammoth and Flint Ridge cave systems in Kentucky, giving rise to what is widely regarded as the first ever text adventure. The 'Pirate's Maze' in the game had a surreal, slightly nightmarish quality where doubling back on your movements in various compass directions wouldn't always return you to the same place. The only way to get your bearings was to drop inventory items in its various identical rooms to try and navigate it, or draw a map. It was the humble beginnings of a typical adventure game scenario that would cause a generation of videogamers to pick up pen and graph paper and become would-be cartographers themselves.

The concept of creating a maze as an environment for a videogame goes back even further, to the computer labs of the Massachusetts Institute of Technology in the late Fifties. In 1956 the distinguished mathematician Claude Shannon joined MIT's Research Laboratory of Electronics. Along with devising one of the first computerised chess programs, Shannon had created Theseus, a mechanical roving 'mouse' named after the mythical slayer of the Minotaur of the Cretan



» [Arcade] Atari's *Gotcha* – the eternal battle of the sexes between a plus sign and a square blob.

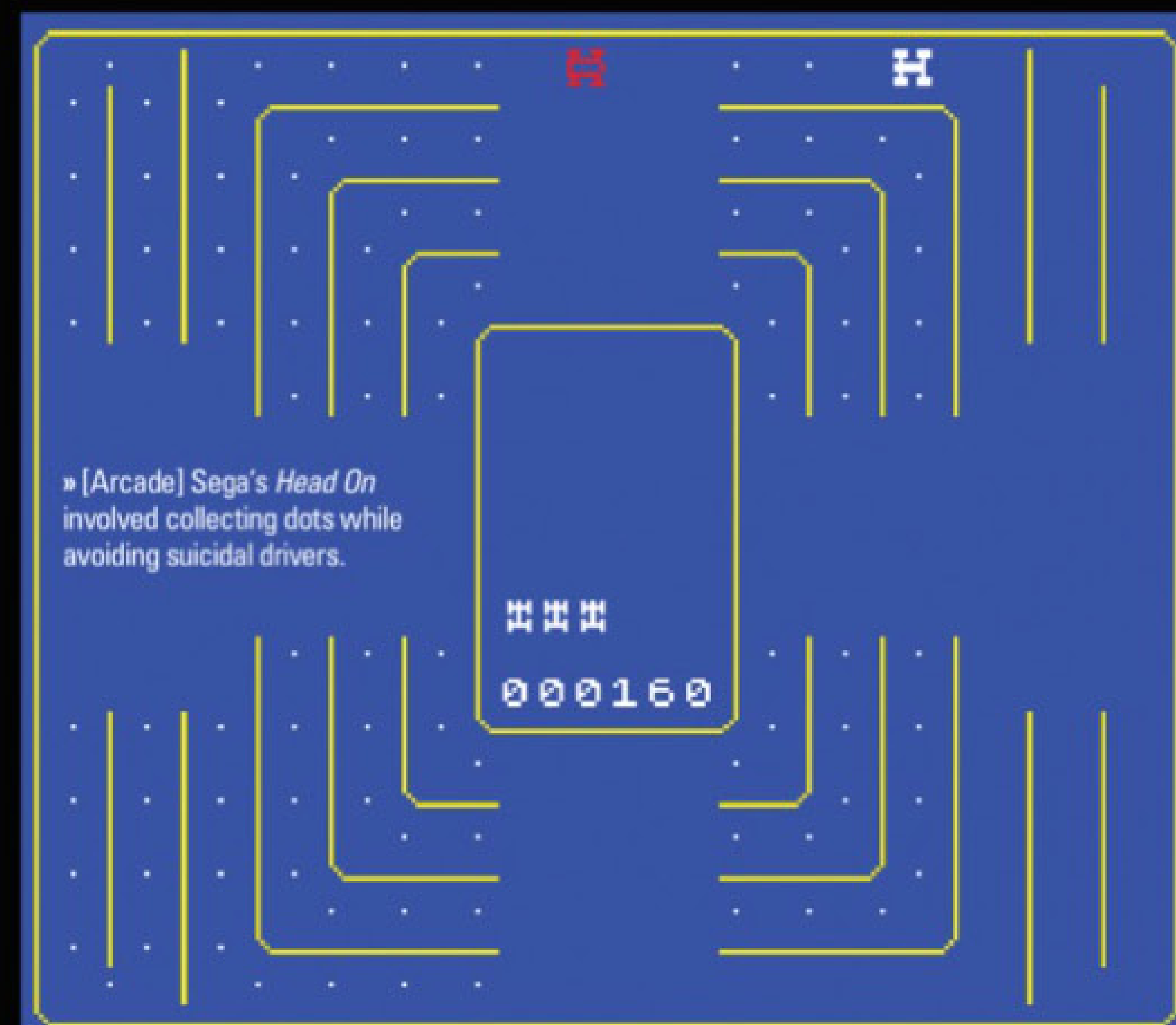


» [Arcade] *Wizard Of Wor* was an enjoyable maze shooter, especially with two players.



» [Arcade] *Rally X* featured sprawling scrolling mazes and *Wacky Races*-style motoring.

> "I was a huge Gauntlet fan and loved the way that game handled four players"
> George Petro



» [Arcade] Sega's *Head On* involved collecting dots while avoiding suicidal drivers.

SELECTIVE TIMELINE

1959 – MOUSE IN THE MAZE
■ Created by students at MIT, this was the first program to display a maze layout on a computer.

1973 – GOTCHA
■ This monochrome Atari coin-op, designed by *Pong* creator Al Alcorn, was the first arcade maze game.

1974 – MAZE WAR
■ The first example of a navigable 3D maze environment, and the grandfather of the first-person shooter.

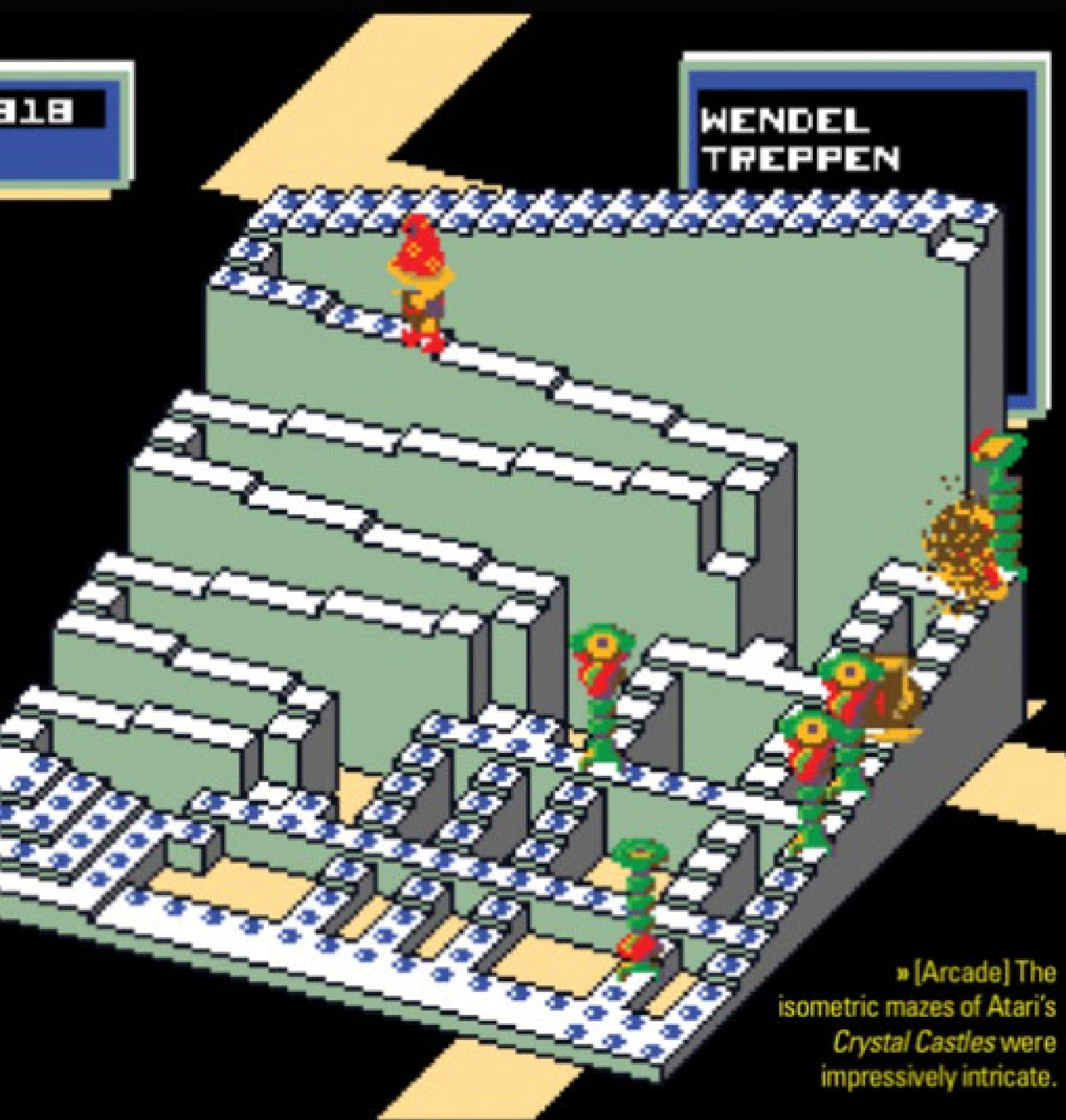
1975 – COLOSSAL CAVE ADVENTURE
■ The first parser-based text adventure featuring several mazes explored by typing in different compass directions.

1976 – HEAD ON
■ A Sega arcade game that introduced the concept of collecting dots to proceed to the next level, a year before *Pac-Man*.

1976 – THE AMAZING MAZE GAME
■ An early example of a competitive maze puzzle game, where two players battled to reach the exit before each other.

1977

1978



» [Arcade] The isometric mazes of Atari's *Crystal Castles* were impressively intricate.

WE SPEAK TO... George Petro, co-designer, Trog



How did the idea for *Trog* come about?
I had recently spent a weekend with some friends and, for some reason, we started playing the 'Dots and Boxes' game. It just clicked that this might make a cool videogame. Making the leap to cute dinosaurs was easy. Jack and I had just finished a two-year stint working on *NARC*, which is the opposite of cute dinosaurs. We were looking to try something different and family-oriented. The original prototype software used dots and bars drawn by me, and some billiard balls from the game *Tri-Sports*. Even without cute graphics, the gameplay was fun.

Was it always your intention to make *Trog* a simultaneous four-player game?
I wanted it to be a four-player game from the beginning. I was a huge *Gauntlet* fan and loved the way that game handled four players. You may notice some similarities between the *Trog* cabinet and the *Gauntlet* cabinet!

Were you disappointed that the original 'Dots and Boxes' prototype, where players placed bones to direct their dinosaur, never officially got a release?
I was… the basic problem is that we created a cute game to appeal to kids with a more mature play mechanic. During testing we found that kids really wanted to play but were confused because they kept trying to control the dinosaur. Much of the time, we would find the game abandoned during play. Also, we found that adults were not initially attracted to the game. Once they started playing, they seemed to enjoy it. Eventually management decided that we were not going to mass-produce the game. I said 'Give me four weeks to salvage all of the work'. The version where the player controls the dino is what we ended up shipping. The working title for the new version was 'Pac-Trog'…

What was the best thing about getting to design *Trog*?
The effect it has on young players. More than 20 years after it was created, the game still holds its appeal. My kids and all of their friends have grown up playing the *Trog* I have in my basement. That's a very rewarding feeling.



labyrinth. Shannon's creation could be taught to navigate a physical maze, and was the first device of its kind to display artificial learning and intelligence. In 1959, inspired by Shannon's work, two grad students, Doug Ross and John Ward, wrote *Mouse In The Maze*, a program for MIT's TX-0 computer. It allowed users to draw a maze on the systems' primitive CRT screen with a light pen. A small 'blip' representing a mouse would then enter and navigate the maze looking for other dots representing cheese wedges. This program was one of the first ever interactive videogames, even if it was merely a digitised version of the Theseus project.

The first appearance of a maze-based arcade game was Atari's *Gotcha* from 1973, designed by *Pong* creator Al Alcorn. It was the fourth arcade game by the company following *Pong*, *Space Race* and *Pong Doubles*, but elicited controversy due to a racy advert depicting a man chasing a scantily-clad blonde, and a pair of spherical pink controllers that looked suspiciously like breasts. The questionable cabinet design was rather incongruous, and the black-and-white game screen bore no resemblance to the dodgy marketing ploy. It was simply a representation of a maze through which one player, represented by a square, pursued a second player, represented by a cross. The most interesting aspect of the game was the fact that the maze layout continually shifted during play, making catching Player Two more exciting than it could have been, but the game received a less than spectacular reception from the public.

The very first game to feature an environment that could be explored in three dimensions, *Maze War*, arrived in 1974 on the Imlac PDS-1 computers at a NASA research centre in California. It offered a primitive deathmatch-style mode where players, depicted by floating eyeballs, could wander through corridors and shoot at each other in a 3D space. It was, by all accounts, the birth of the first-person shooter, more on which later.

Bally/Midway's *The Amazing Maze Game*, released in 1976, featured far more intricate maze layouts than *Gotcha*, and a frenetic two-player race to be the first to reach the exit. The game was produced by an external research group, Dave Nutting Associates, and took advantage of new arcade hardware

1979 – ROGUE
■ An early dungeon crawler featuring turn-based play set in a labyrinth of interconnected rooms.

1980 – PAC-MAN
■ The first universally popular arcade maze game, featuring full-colour characters and ghost-munching power-ups.

1980 – RALLY X
■ One of the first maze games to feature a scrolling environment that was larger than the size of the screen.

1981 – WIZARD OF WOR
■ A top-down maze-based shooter that supported cooperative play and sported a clever line-of-sight mechanic.

1982 – LADY BUG
■ A *Pac-Man* derivative with walls that could be rotated, adding to the player's freedom of movement.

1982 – MR DO!
■ Possibly the finest tunnelling arcade maze game, starring a polka-dot wearing clown with a magic powerball.

1983 – AMIDAR
■ One of the first 'grid capture' games involving colouring sections of the screen by traversing them.

1983 – 3D MONSTER MAZE
■ An early example of a 3D maze game on a home system, programmed by Malcolm Evans for the Sinclair ZX81.

1984

1985 – DANDY
■ This real-time Atari 8-bit dungeon featured multiplayer co-op play and was the original inspiration for Gauntlet.

1986

and technology to produce a stream of randomised maze environments. "In the early days of videogames in the Sixties and Seventies all hardware was solid state, meaning all logic was predetermined," explains founder Dave Nutting. "These games had predetermined patterns that a skilled player could eventually learn. My group worked as an R&D team for Bally Manufacturing, where we created the first microprocessor pinball game using the Intel 4-bit processor. With the introduction of the 8-bit microprocessor we immediately created the first 8-bit videogame system. My partner Jeff [Frederiksen] created *The Amazing Maze Game* in order to test out his new hardware design. We took full advantage of the power of our new logic, adding the element of infinity into our game designs, with no predictable patterns, as in the rules of nature or quantum physics. In *The Amazing Maze Game* the mazes were computer generated and adapted to the player's skill level."

Sega's *Head On*, from 1979, was an important title as it introduced the concept of collecting dots in a simple maze layout to clear each level. At the same time, players had to avoid head-on crashes with computer-controlled cars driving haphazardly around the maze in the opposite direction. The idea of negotiating a maze collecting dots and score-boosting items would of course form the basis of the most famous arcade maze game franchise of all time, but more on that later. One variation of the genre that became popular from the early Eighties onwards was the maze or 'corridor' shoot-'em-up. Tim Skelly's *Armor Attack*, released by Cinematronics in 1980, used a coloured overlay to depict a symmetrical maze layout, within which one or two players could wage war on vector-rendered tanks and choppers in jeeps. Stern's *Berzerk* took place in what was effectively a giant maze formed from a 256x256 grid of randomly generated rooms. Gameplay focused on shooting robots and avoiding the impending approach of your hapless humanoid's nemesis, the smiley-faced Evil Otto.

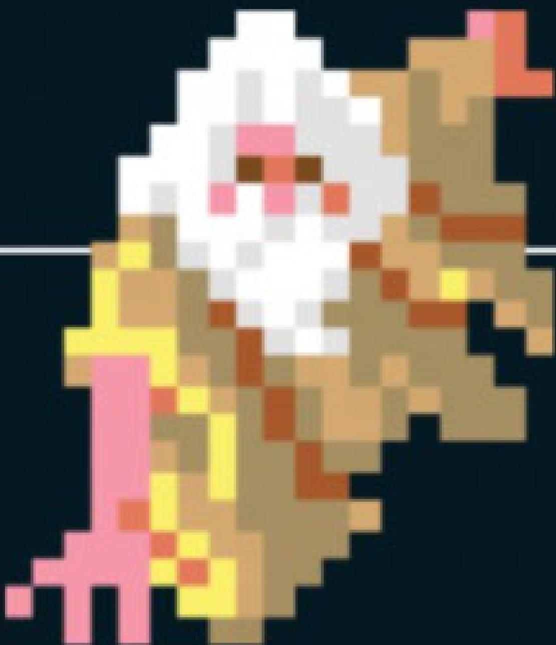


» [Arcade] Exidy's *Mouse Trap* arcade cabinet featured coloured buttons that would open corresponding gates on-screen.

Another classic maze shooter of the era was *Wizard Of Wor*, which also included two-player co-op, and impressive digitised speech like *Berzerk*. Like *The Amazing Maze Game* it was designed by Dave Nutting Associates, and sported some clever features, such as its *Defender*-style radar scanner and 'line of sight' mechanic. "I got the idea for *Wizard Of Wor* from the movie *Alien*," recalls Dave. "A spaceship travelling about in space would be invaded by aliens. The ship had sensors that would monitor these aliens, but they did not know exactly their location until in line of sight. So in *Wizard Of Wor* I created a building with corridors and a location screen so you would know where the monsters were located, but not exactly where until they were in view. To get all the gameplay elements on the screen I had to create the corridor patterns, although I only had space for 16 different ones. My programmer writing the actual code came up with the idea of adding the Wizard, hence the name of the game."

As enjoyable as games like *Wizard Of Wor* were, it was dot-gobbling, rather than monster shooting that would really capture the attention of arcade goers in the early Eighties with the arrival of Namco's seminal *Pac-Man*. Despite being nothing but a spherical set of yellow gnashers, the game's iconic star, along with its quartet of goggle-eyed ghosts, suddenly gave the arcade maze game a sense of personality. Pac-Man's ability to turn the tables on the phantom foursome by chowing down a power pill gave players a sense of joyful empowerment, if only for a few fleeting seconds. And the way the mazes were set up with escape 'warps' on either side of the screen (a feature they shared with *Wizard Of Wor*) kept the flow of the game just the right side of total inundation by ghostly death. Designer Toru Iwatani had conceived *Pac-Man* as an endearing, light-hearted game accessible to everyone from seasoned gamers to women and couples, and it worked. It became Namco's biggest selling arcade game of all time, inspiring a slew of clones on home systems like the Spectrum's *Hungry Horace*, the VIC-20's *Jelly Monsters* and the BBC Micro's *Snapper*. *Pac-Man*'s success spawned countless sequels, from *Ms Pac-Man* in 1981 to the more recent (and rather excellent) *Pac-Man Battle Royale* in 2011. Interestingly, while many followed the traditional formula the series is known for, it has been pleasingly rejigged over the years with genuinely innovative updates, including the aforementioned *Battle Royale*, which pitches four Pac-Men against each other, to the genuinely fantastic *Championship Edition*, that turned the extremely popular franchise into a frantic score attack game.

"I got the idea for Wizard Of Wor from the movie Alien"
Dave Nutting

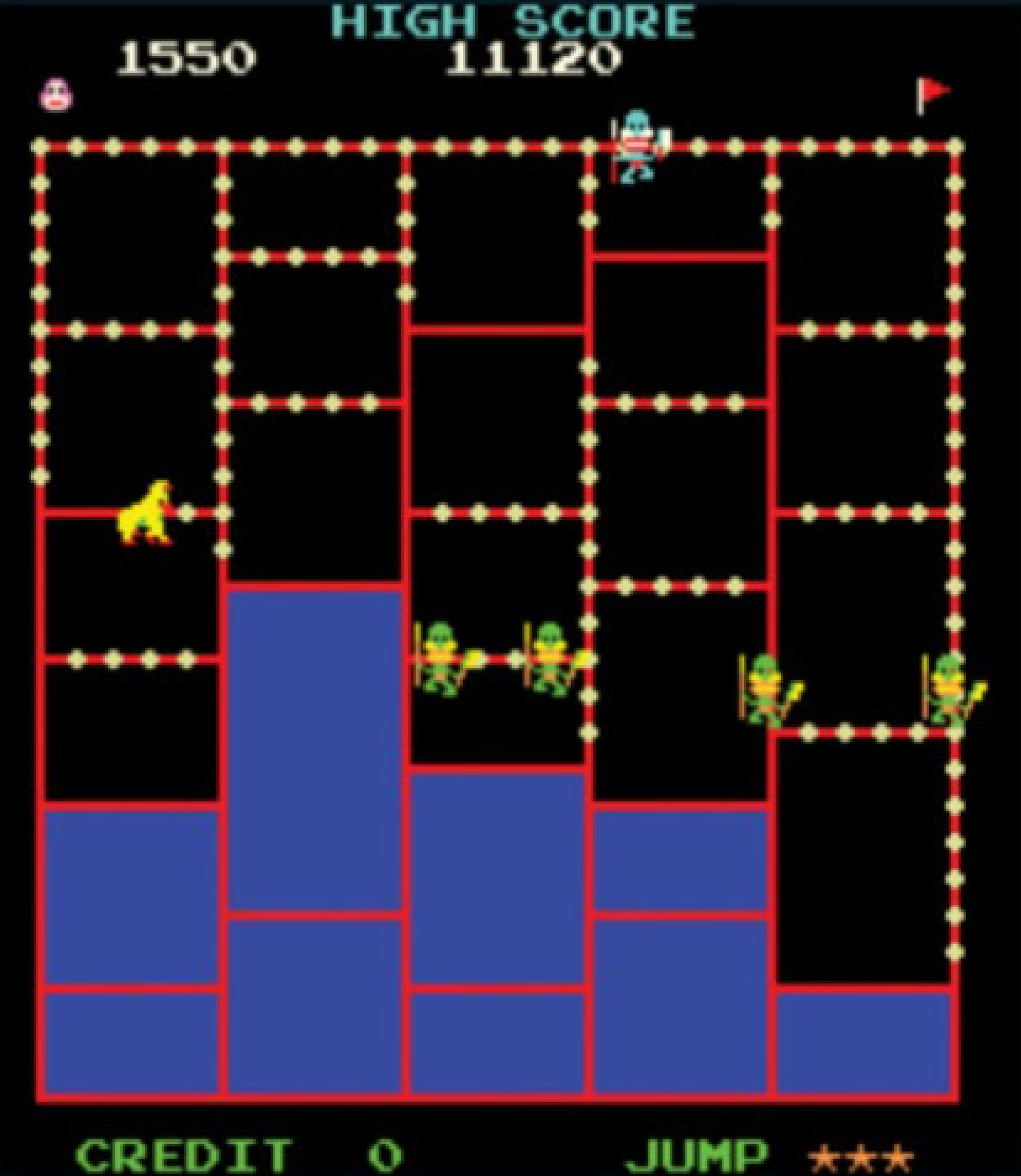


1987 | 1988 | 1989 | 1990 | 1991 | 1992

GAUNTLET
■ One of the most popular Eighties maze crawlers after *Pac-Man*, the coin-op supported up to four players.

TROG
■ A four-player *Pac-Man* variant with great graphics, pitting player-controlled dinosaurs against cycloptic cavemen.

WOLFENSTEIN 3D
■ id Software's famous early first-person shooter was basically a series of mazes populated by Nazi mutants.



» [Arcade] *Amidar* saw you in the role of a giant silverback gorilla who enjoyed colouring-in squares.

WHAT MAKES A GREAT MAZE GAME?

The elements that drag us back for one more go

GAMEPLAY MECHANICS

■ It's always good to have a clever gameplay hook if you're going to bring gamers back for one more go. *Pac-Man*'s power pill that turned the tables on enemy ghosts and the barrier flipping abilities of *Lady Bug* are great examples of this.

COLLECTIBLES

■ Tearing around a maze can be a lonely task so many developers will use various items and power-ups to give their titles a little more focus. *Pac-Man* and *Lady Bug* are good examples of this approach.

LEVEL DESIGN

■ If you're going to be stuck in a single-screen maze you want it to be as varied as possible, with plenty of nooks and crannies to ensure it never gets boring.

MEMORABLE CHARACTERS

■ From the iconic styling of *Bomberman* to the playfully silly look of *Trog*, many maze games feature charming looking characters and memorable adversaries. A sharp contrast to the drab layouts of the actual mazes.

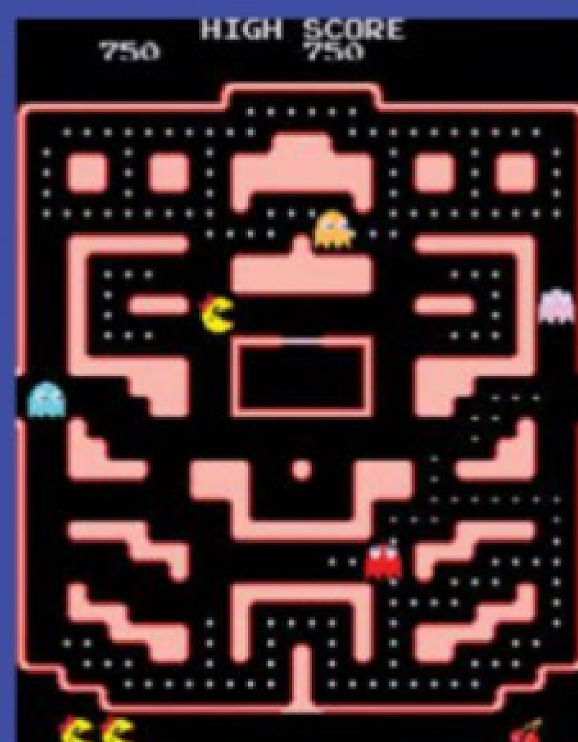
KEEP IT SIMPLE

■ The best maze games are those that don't over complicate things. Keep it nice and straightforward so you can simply concentrate and clearing a stage as quickly as possible.

Bluffer's guide

FIVE ESSENTIAL GAMES

Feeling the need to gobble cherries, splatter Sno-Bees or blast hordes of ghosts? Then try these…



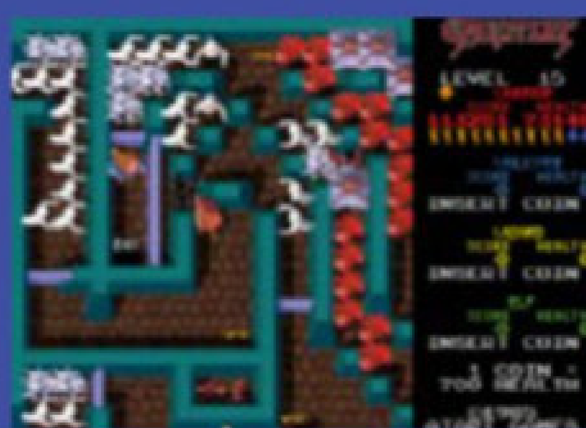
MS PAC-MAN 1982

While the first *Pac-Man* is obviously a timeless arcade game, this feminine sequel took the original ingredients and made them even better, adding more maze layouts and smarter ghosts. Plus the ribbon-sporting Ms Pac is easier on the eye than the original yellow blob. If you like that sort of thing.

MR DO! 1982

Although not a traditional arcade maze game, *Mr Do!* is still brilliant. With its clown hero tunnelling around the screen grabbing cherries, zapping monsters with a bouncing ball, or dispatching them with strategically placed apples on the bonce, its arguably an even more enjoyable game than *Pac-Man*.





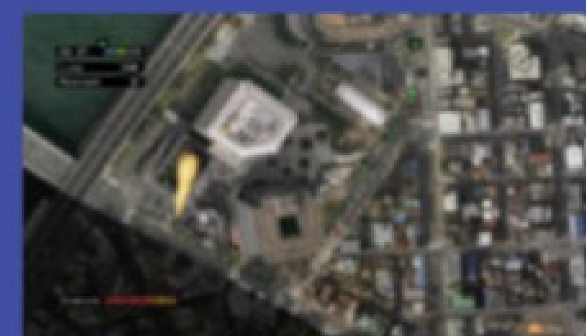
GAUNTLET 1985

Wizard needs food… badly… Atari's four-player *Gauntlet* cabinet was a staple of the Eighties arcade, and the recipient of many a schoolboy's pocket money, as would-be adventurers in short-pants battled their way through labyrinthine dungeons teeming with grunts, ghosts and scary red demons.

TROG 1990

Midway's maze game was the closest you could get to a four-player *Pac-Man* in its time, and remains one of the prettiest games of its type due to Jack Haeger's brilliant 'Playmation' graphics. Transforming from cute dino to ravenous T-Rex to devour hapless cavemen, or each other, never gets old…



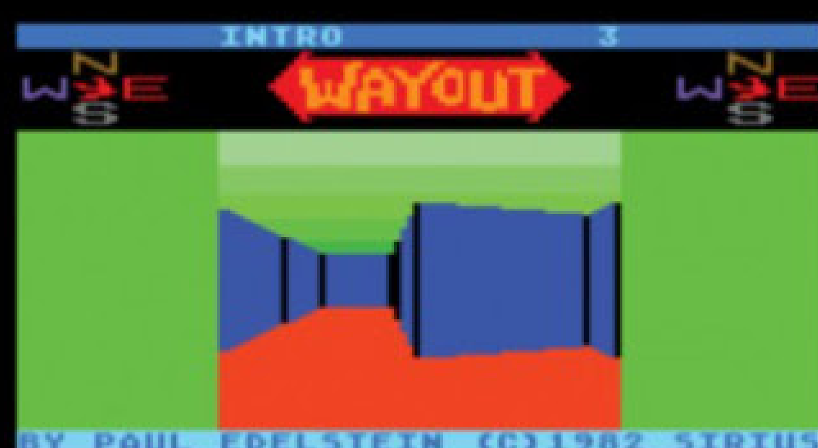


THE LAST GUY 2008

This effort from SCEJ for the PS3 proves that it's still possible to come up with interesting ideas for the maze genre. As the titular Last Guy you rush around the amazingly detailed real-world cities using thermal imaging to rescue civilians and protect them from zombies. Civilians follow you *Flicky*-style, meaning the more you rescue, the bigger they chance they'll get eaten.

> "This feminine sequel took the original ingredients and made them even better"

While *Pac-Man* played a big role, there were plenty of other innovations for the genre in the early Eighties. Konami's *Tutankham* and Namco's *Rally X* introduced scrolling maze layouts for players to travel through, offering hazard-filled Egyptian tombs and top-down city streets populated by boy racers. *Tutankham* was an extremely tough corridor shooter featuring a grave-robbing archaeologist armed with a laser pistol taking on asps, vultures and bats, while grabbing treasure and keys to open up routes to the next level. *Rally X* cast players as a racing car driver tasked with collecting flags scattered across a maze-like scrolling map while trying to evade the attentions of rival drivers, which could be stalled by using smoke screens. As with *Wizard Of Wor* it was notable for implementing a radar scanner for tracking the movements of pursuing enemies. The game inspired a clone called *Radar Rat Race*, produced by Commodore for its VIC-20 and C64 computers, where the player took the role of a mouse, the flags were replaced by cheese and the enemy cars by rats.

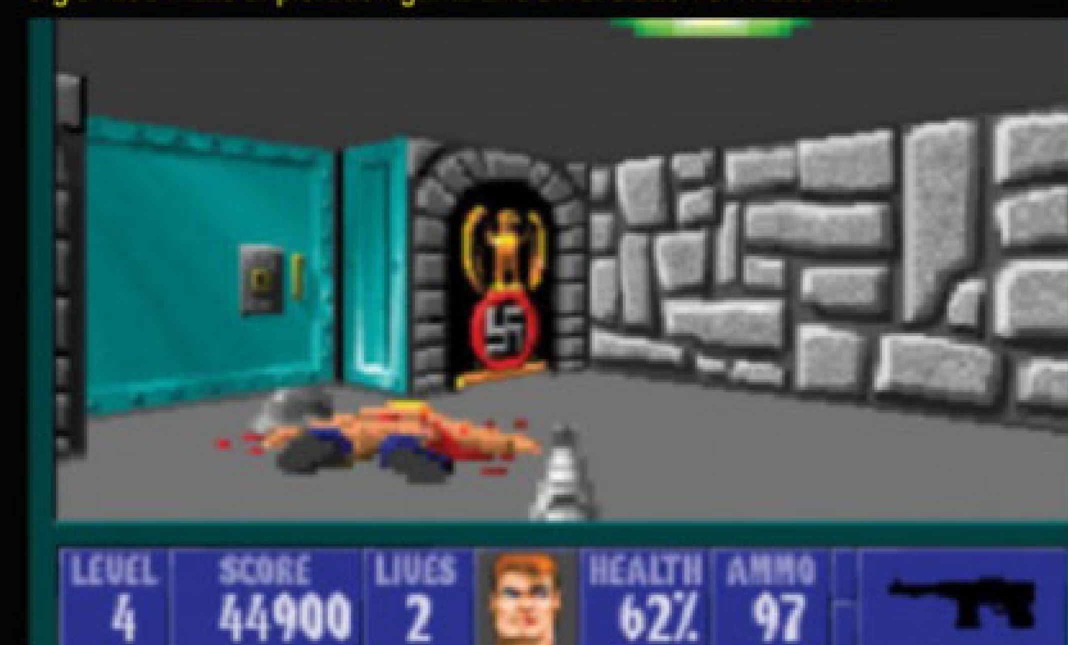


» [Atari 8-bit] *Wayout*'s 3D engine was spectacular for its time.

Tunnelling-themed arcade games like *Dig Dug* and the excellent *Mr Do!* could also be regarded as free-form maze games of sorts, with players digging their own routes through their screens, leading to the likes of *Boulderdash* and *Repton*, which integrated maze-like layouts into large scrolling levels. Sega's *Pengo*, which placed players, in the form of a cute penguin, into a maze made of ice blocks that could be shifted around or used as ammunition against a gang of rampaging enemies called *Sno-Bees*, was another variant on the free-form maze theme. A further offshoot was the 'grid capture' or colouring maze game, typified by Konami's *Amidar* and Exidy's *Pepper II*. Both titles featured mazes formed from irregular rectangles that players attempted to 'colour in' by moving around their sides. In *Amidar* you were inexplicably placed in the shoes of a gorilla tasked with turning the screen blue while a number of what appeared to be spear-holding Zulu warriors tried to hunt you down. *Pepper II* was even more bizarre, with a googly-eyed haloed blob being chased by a bunch of weird critters that resembled rejects from *Space Panic*. Universal's *Lady Bug* was a clever twist on the *Pac-Man* style dot-muncher, sporting mazes with gated walls that could be rotated by the player's spotty insect hero. This idea was expanded on in Synapse Software's delightfully surreal *Drelbs*, which saw players controlling an eyeball on legs spinning gates to form coloured squares. Visions of deadly ghostly faces and 'kissable' maidens would appear in the parts of the screen the player had filled in, while enemies would plod around the screen trying to undo your hard work.



» [C64] The creepy *Scarabaeus* mixed puzzle solving with evading ghosts.



» [PC] Blasting stormtroopers aside, *Wolfenstein 3D* was really a just a glorified maze exploration game and an evolution of *Maze War*.

In 1983 John Palevich created *Dandy*, a dungeon-crawling action game for the Atari 8-bit home systems, which featured a pioneering four-player co-op system. Although John had never seen it, the game bore a resemblance to the earlier dungeon-crawl game with maze-like overtones, *Rogue*, although it was a real-time rather than turn-based title. *Dandy*'s dungeons consisted of a series of scrolling 2D mazes populated by monsters and treasure, and the


» [PS2] *Ico* is essentially a giant maze game, with the aim to escape with the help of your mysterious female sidekick.

game's hero could defend himself by firing arrows at his foes. It was *Dandy* that would inspire Atari's arcade smash hit *Gauntlet*, the ultimate multiplayer fantasy maze shooter, which in turn birthed an army of clones for home systems such as Firebird's *Druid*, Pandora's *Into The Eagles Nest* and Team 17's *Alien Breed* series. The same year saw the debut of the Atari's *Crystal Castles*, which starred a honey-obsessed bear called Bentley collecting gems across beautifully depicted Escher-like levels, drawn in an impressive isometric perspective. Another hugely popular multiplayer maze game was Hudson Soft's *Bomberman* (aka *Dynablaster*). While the original NES version of the game was a single-player title with the aim of blowing up AI monsters in a maze environment, later versions, such the PC Engine and Amiga ports, allowed unmitigated explosive multiplayer chaos. Combatants could cause pyrotechnic chain-reactions across the screen in an effort to eliminate each other, to much shared giggling and amusement, making *Bomberman* and its many iterations an essential party game at many a social gathering to this day.

One of the last Western arcade games to feature traditional top-down maze environments was Midway's *Trog*, the final released version of which was a multiplayer take on *Pac-Man* featuring 'claymation' dinosaurs and cavemen. However the first concept for the game was something rather more original, as co-designer and graphics artist Jack E Haeger recalls. "The actual mechanics of the game were based on the paper and pencil game known as 'Dots and Boxes'," he reveals. "George Petro had brilliant ideas on how to make it a simultaneous four-player game, which in the original version gameplay was extremely entertaining and competitive. The original mechanics of *Trog* were unique – players controlled a floating 'hand' icon and did not directly control their dinosaur [instead laying 'bones' to set paths for their avatar]. Once players were fully aware of this and understood the essential 'cutthroat' strategy of the multiplayer game, it was a blast to play. Unfortunately, some players were confused initially – thinking that they were supposed to be in direct control of the dinosaur, and that the joystick wasn't working..."

DID YOU KNOW?

1 After a hostile response to its suggestive dome-shaped controllers, Atari ended up refitting *Gotcha* cabinets with standard joysticks.

2 *Pac-Man*'s power pellets, which turned the tables on the ghosts, were inspired by Popeye chugging on a can of spinach in the TV cartoon show.

3 *3D Monster Maze*'s programmer Malcom Evans managed to make himself jump in fright when the T-Rex popped up during testing, much to his wife's amusement.

4 Arcade sequel *Ms Pac-Man* wasn't developed by original creator Namco but by an American company, General Computer Corp.

5 *Amidar* was named after a Japanese lottery drawing game, Amidakuji, which resembles a ladder-like grid of rectangles.

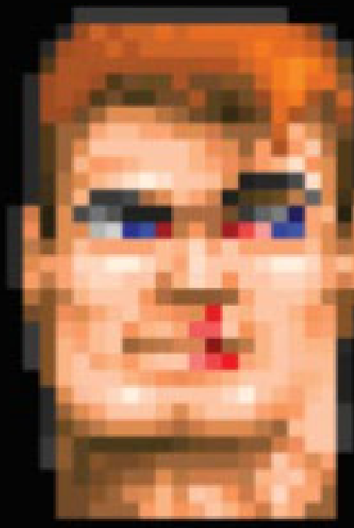
6 *Gauntlet* designer Ed Logg admitted that Atari's game had been directly inspired by *Dandy* in a speech at the 2012 Game Developers Conference.

7 Ultimate's Spectrum releases like *Atic Atac* and *Sabre Wulf* were effectively giant mazes, influencing developers like Odin and Bubble Bus to create similar titles of their own.

8 Artist Jack Haeger sculpted *Trog*'s dinosaur and caveman characters from modelling clay, before posing and digitising each of their animation frames by hand.

9 *Tinkle Pit*, a 1993 arcade maze game, features characters from previous Namco games such as *Pac-Man*, *Blinky*, and the Koopas from *Dig Dug*.

10 Mazes were a staple of Nineties graphic adventures – see the route to the Swordmaster in *Monkey Island*, or the Fireberry maze in *Legend Of Kyrandia*...



While the traditional arcade maze game was going into decline, apart from the occasional reinvention of Namco's *Pac-Man* franchise, developers were well underway on a different path, into the realm of 3D. As for experiencing the delights of exploring a 3D maze on a home system, one of the most memorable early examples was Malcolm Evans's *3D Monster Maze*, released on the Sinclair ZX81 in 1982. This remarkable program generated random maze layouts for players to try and escape from, while knowing that somewhere in its corridors a hungry T-Rex lay in wait with open jaws.

Other good examples of 3D maze games on 8-bit computers include Sirius Software's pioneering releases *Wayout* and *Capture The Flag*, and Ariolasoft's atmospheric Eyptian-themed *Scarabaeus* on the C64. Originally designed for Atari's 8-bit home computers, *Wayout*, another 1982 release, was one of the first games to offer full movement in 360 degrees through a maze, rather than the strict 90-degree turning system seen in games like *3D Monster Maze*. Looking at *Wayout* today, its surprising how much the underlying graphics engine resembles the one that powered id Software's seminal *Wolfenstein 3D*, produced nearly a decade later. The game's sequel, *Capture The Flag*, was equally groundbreaking, offering a split-screen display that supported two players, one attempting to infiltrate the maze and capture their opponent's flag while the second tried to catch them.

In the Nineties the maze became a staple feature of role-playing adventures like *Dungeon Master*, *Eye Of The Beholder* and *Hired Guns*. And of course with the advent of early 3D first-person shooters like *Wolfenstein* and the Jaguar's *Alien Vs Predator*, the maze became the stomping ground for blasting Nazis or acid-oozing xenomorphs, leading to the likes of *Doom* and the exponential rise of another massively popular videogaming genre. So next time you fire up the latest edition of *Call Of Duty* or delve into the intricate worlds of *Dark Souls II* or *Titanfall*, spare a thought for that little lost mouse in the MIT labs in 1959. While today's digital environs are light years away from the digital mazes of yesteryear, if it wasn't for him you might still be playing *Minesweeper*... ★




» [SNES] You'd often need pen and paper to map out the dungeons of *Eye Of The Beholder*. Square paper worked best.

THE UNCONVERTED

Arcade games that never made it home

MACH BREAKERS

■ **Developer:** Namco ■ **Year:** 1994 ■ **Genre:** Sports

■ **By the mid-Nineties, regular athletics games were no longer enough for gamers – or at least, that was Namco's perspective.** Eschewing the charms of real-world athletes like Daley Thompson, *Numan Athletics* was a cult hit featuring superhuman athletes. Namco was pleased enough with its performance that it quickly put a sequel into production, and *Mach Breakers* arrived the next year.

Mach Breakers offers players a choice of seven extraordinary individuals with ordinary names, like the American all-rounder Johnny and the Japanese speedster Makoto. They're pitted against each other in a variety of events, and while the opening sprint is just extraordinarily fast, things quickly turn bizarre. There's no 110-metre hurdles event here – instead your chosen superhuman needs to kick their way through thick walls of ice. Even stranger events await, from monster-hauling to missile-chucking, and even miniature shoot-'em-up sections that resemble a light version of Atari's classic *Tempest*.

It's a rather excellent multiplayer game, with up to four players able to join in and simple controls to allow even first-timers a fair chance of success. This is aided by the game's structural improvements over the original *Numan Athletics* – events are now easier to pass and players are offered a choice of events after the initial sprint is complete. The game is visually appealing too, with the kind of gigantic sprites and scaling effects that had become commonplace in 2D games by the mid-Nineties. In fact, much of the game's appeal lies in the sense of humour conveyed by the visuals, as it conjures up some ridiculous sights. Our favourite is the Godzilla stomp that follows a failed monster-hauling session.

It's not hard to see why *Mach Breakers* didn't make it home, as it's one of those titles which clearly illustrates the differing expectations of the home and arcade markets – there's simply not enough content here to justify a home release, especially given the multitude of conversions that would have been needed in the generational transition of the mid-Nineties. It's a multiplayer classic that is at its best when swallowing coins, and we're glad that Namco recognised that.



CONVERTED ALTERNATIVE

NUMAN ATHLETICS 1993

Mach Breaker's predecessor *Numan Athletics* is similarly awesome and features events including train-pushing and building-jumping. If you're looking to pick up the home release though, you might be in for a bit of a struggle – it was released exclusively in Japan.



» Hauling a Godzilla-style monster along is one of the most impressive sites the game has to offer, but it's no pushover – precise timing is needed to succeed.



» There's no joystick usage at all in *Mach Breakers* – every action takes place across the three buttons, with those on the left and right filling in for directions.

» Characters are varied and play uniquely, with participants rated on their performance in speed and strength. Choose wisely to compensate for the events you're not so hot at!

» It's clear that the athletes in *Mach Breakers* are more than just human, with manga-style superhero flourishes accompanying many of the most impressive in-game actions.

BEST LEFT IN THE ARCADE

LORD OF GUN

■ **Developer:** IGS ■ **Year:** 1994 ■ **Genre:** Lightgun shoot-'em-up

■ ***Lord Of Gun* aims to offer variety to players, with each stage offering a different setting and new weaponry.** However, almost every aspect of the game is laughably bad. The visuals are awful, featuring unattractive sprites with some of the most atrocious animations to have appeared in a Nineties arcade game. This would be forgivable if the game played well, but there is no semblance of a difficulty curve on show. Hostages are often identical to enemies, meaning that players will be relying on shouts of "I'm a hostage" to identify them – always a solid design choice in noisy arcades.

While *Virtua Cop* arrived in the same year as *Lord Of Gun*, it's a little unfair to draw a comparison between the two – they were developed for very different markets by companies in wildly different positions. However, it's harder to forgive the fact that *Lord Of Gun* struggles in comparison with *Operation Wolf*, a game released seven years earlier. By failing to recognise the advances made in the intervening years by games like *Alien 3: The Gun* and *Steel Gunner*, IGS doomed *Lord Of Gun* to irrelevance. Thankfully, the developer left the genre alone entirely in the following years.



HOT SHOCKER

■ **Developer:** E G Felaco ■ **Year:** 1982 ■ **Genre:** Maze



» [Arcade] Each stage has a distinct colour scheme, including one with an invisible web.

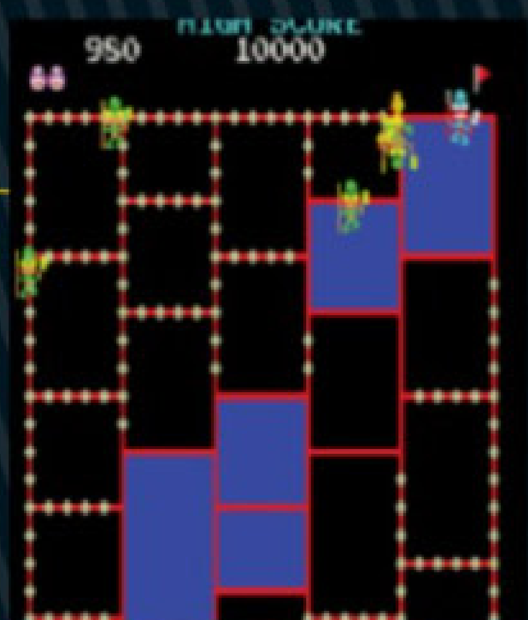
■ ***Hot Shocker* is one of the stranger releases of the early arcade market.** The game resembles Konami's early release *Amidar*, but has moved from a grid format to an octagonal maze that resembles a spider's web. You're tasked with avoiding enemies, while visiting every part of the maze with wire in order to connect phone lines and move onto the next level. Most of them move around the web and only serve to slow you down in order for the more lethal enemies to catch up to you, but a lightbulb appearing at the fringes will zap careless players.

The main addition to the *Amidar* formula is that of a power-up, which gives your hero a temporary boost in the form of speed and invincibility. It resembles an enemy with different colouring though, so it's easy to miss. *Hot Shocker*'s failure to leave the arcade is easy enough to explain – as the only game manufactured by E G Felaco and a pretty derivative one, there was no mileage in licensing the game for home systems. And if you were a clone programmer, was there any sense in skipping the innovator to clone the imitator? No, there was not.

CONVERTED ALTERNATIVE

AMIDAR 1981

Amidar was the obvious inspiration for *Hot Shocker*, and is easily the more famous game. Konami's game was only converted to the Atari 2600 officially, but a large number of unofficial clones exist for a variety of formats including *Cuthbert Goes Walkabout*, *Traxx*, *Crazy Tracer* and *Crazy Painter*.



CONVERTED ALTERNATIVE

MIDNIGHT RUN 1995

As we mentioned, *Winding Heat*'s predecessor did manage to make it home. A PlayStation version was released in 1997, exclusively in Japan. Be warned, though – before you rush to import it, know that the conversion is no classic, thanks to some jerky visuals and sloppy handling.



WINDING HEAT

■ **Developer:** Konami ■ **Year:** 1996 ■ **Genre:** Racing

■ **Konami certainly waited a long time to follow up on *Road Fighter* – despite making its debut in 1984, a sequel didn't appear until the mid-Nineties.** Luckily for fans of that sequel, the 1995 release *Midnight Run*, a new game was much quicker to arrive as Konami released *Winding Heat* just a year later.

Winding Heat offers a surprisingly large number of cars, with 14 available – each of which also has multiple tuning options. The excess continues in the on-track action, as while only four drivers take part in each race, they've got to contend with heavy traffic as the races take place on public roads, which bring to mind the mountain passes of the *Initial D* series. Races are fun and frantic thanks to some track design that holds up well, but the handling is disconcertingly loose.



» [Arcade] There might only be four racers, but the battles are always intense on *Winding Heat*'s mountain passes.

With market preferences shifting towards more realistic racers like *Gran Turismo*, arcade racing games were having a hard time attracting attention in the console market. It's likely that *Winding Heat* didn't make it home for that reason – its predecessor, which did manage to reach the PlayStation in 1997, never gained much of a reputation.



HEART

LAND

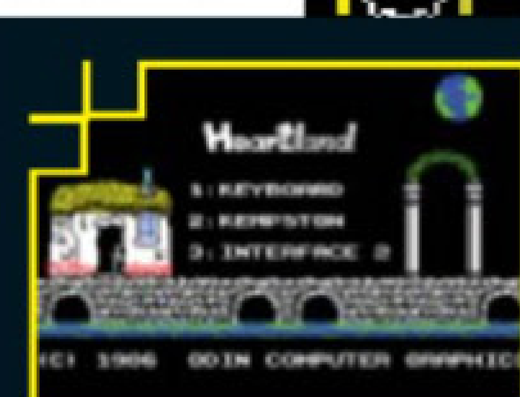
Early successes earned Odin Computer Graphics an enviable publishing deal with the BT-owned software firm Telecomsoft. Rory Milne learns how Steve Wetherill and Colin Grunes produced the 8-bit classic Heartland before the deal went sour

The British gaming industry had to grow up fast. In 1983, bedroom coders were the norm, but by 1984, the market was dominated by professional software houses. 1985 saw the survival of the fittest, although it was becoming clear that small was no longer beautiful. During 1986, arrangements were made for US Gold to market games by Ultimate and for Elite to publish titles by Gargoyle. Meanwhile, similar deals were being made between other large publishers and small but respected development teams.

"I think we all became a bit more serious about things, but we still managed to have plenty of fun," coder Steve Wetherill replies when asked about Odin's big-money contract with Telecomsoft. His response is understandable given the agreement meant he, artist Colin Grunes and Odin's other teen developers would have to produce ten games for BT's software division within a single year.

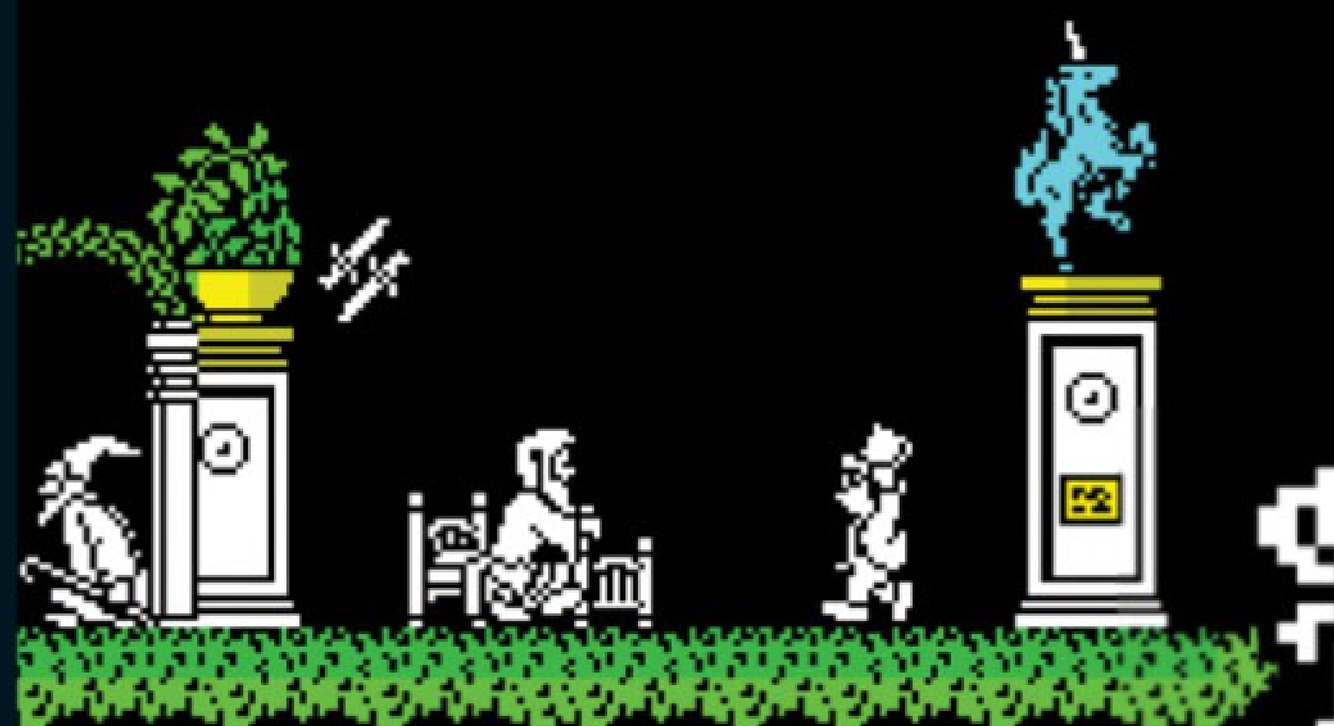
"*Heartland*'s development was commenced around the time of the Odin deal with Telecomsoft, and I think it may have been one of the first titles released under that deal. During the development of *Robin Of The Wood*, on which Paul Salmon was the main artist, Colin had time to come up with an initial walk cycle for Bertie – the main character in *Heartland* – in addition to some other graphics ideas. Well, that's what we called him," Steve grins, before adding, "his full name may or may not have been Bertie Big Boy!"

Teenage high-jinx aside, Steve clearly had a strong work ethic, which saw him move neatly from one project to the next in quick succession. "As soon as Robin was finished I began to experiment with dynamic mask generator code using the walk cycle. I had lots of Berties walking left and right on the screen using the masking technique, and that really set the direction for *Heartland*. The masking technique was the cornerstone of the game – I wanted to be able to give a more solid feel to the sprites in contrast to how previous Odin games drew their sprites. In *Heartland*, I used an 'AND' and 'OR' approach, which essentially used a 'cookie cutter' to remove all the pixels behind each sprite. This technique was quite effective in producing more solid looking graphics, but more CPU cycles were needed to draw each sprite. Additionally, storing this mask for every pixel doubled – on the ZX Spectrum – the amount of memory needed to store each sprite. The code for the game was developed on a BBC Model B computer with the Z80 second processor running CPM. Under CPM we used the M80/L80 assembler/linker combination, and the Memo text editor. The Beebs had twin disk drives, so tools would run on one and game code would live on the other. In order to get code to the Spectrum, we'd use one of a variety of downloaders. Graphics for the first level were designed very early on, along with the main Bertie sprites. The other graphics were developed in tandem with the game code and level editor that I created. It was a visual tool. It allowed Colin to design room layouts and then move between the rooms. It could save and load data – I think we had disk drives for the Spectrums at this stage."

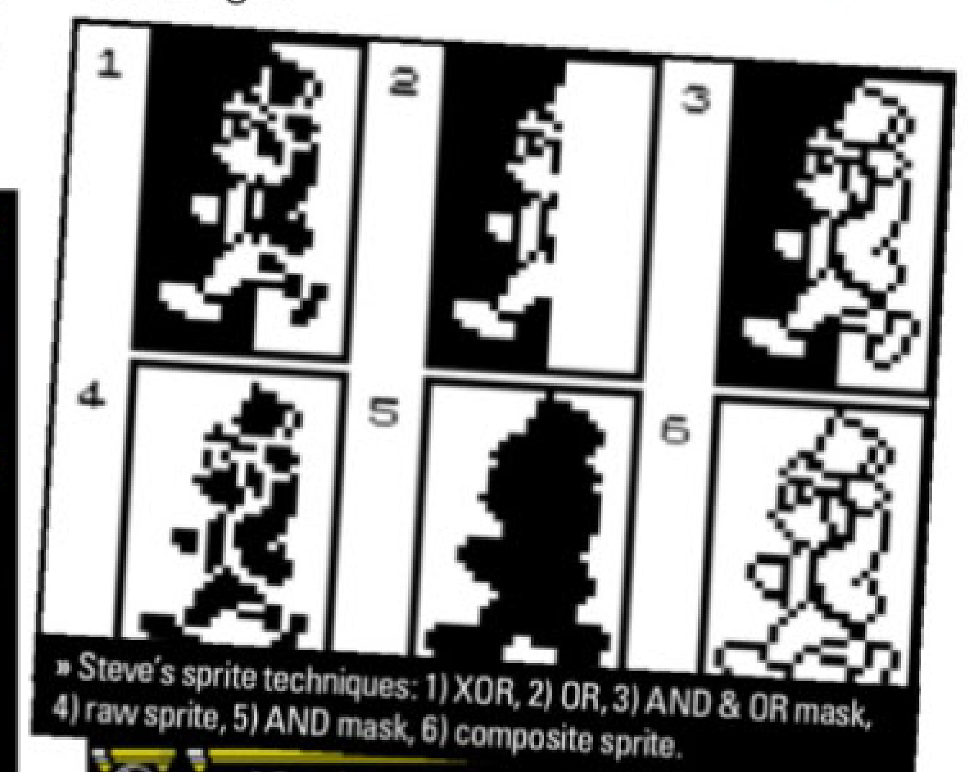


IN THE KNOW

- **PUBLISHER:** ODIN COMPUTER GRAPHICS
- **DEVELOPER:** ODIN COMPUTER GRAPHICS
- **RELEASED:** 1986
- **PLATFORM:** ZX SPECTRUM, COMMODORE 64, AMSTRAD CPC
- **GENRE:** ARCADE ADVENTURE



» [ZX Spectrum] You begin *Heartland* defenceless, but soon collect magic top hats, swords and fireballs to protect yourself.



» Steve's sprite techniques: 1) XOR, 2) OR, 3) AND & OR mask, 4) raw sprite, 5) AND mask, 6) composite sprite.



» [ZX Spectrum] Leaving the entrance to *Heartland*'s gardens in search of a page of a magic book.





» [ZX Spectrum] It's two down, one to go as *Heartland*'s wizard makes use of the fireball spell.

Apart from coding and pixel-art, *Heartland*'s other design duties were shared between its creative partnership with the odd bitmap coming from Odin artist Stuart 'Stoo' Fotheringham, as Steve remembers. "Colin and I worked together very well. With *Heartland*, that was the first time we worked directly together as a duo – *Nodes Of Yesod* was always more of a team effort – and it was definitely an iterative process, with ideas coming from both sides. It was quite productive. Colin did art, level design and background lore. I did code, tools and gameplay design. I think the gameplay evolved pretty organically. We tended not to do a lot of up-front design at Odin, not on details. So we would agree on the large stuff but then work out the details as we went along. Lots of things could drive the design, such as how many 16-pixel-wide sprites would fit into a certain space – for the number of pages to collect in the game. There are clearly elements of *Nodes* and *Robin* in *Heartland*, in that it is room-based. The map is a lot less linear than either of those games, though, the screens being linked portals in two directions. Some of the ideas I came up with for the much-expanded Amstrad version of *Jet Set Willy* showed up again here – the space section, for example, though that was also a nod to *Nodes*. There was definitely collaboration on ideas for art, but Colin did all the pixel work – with the exception of the things Stoo did. I think Stoo quite possibly did a bunch of the in-game plants, and maybe one or two other things. I am reasonably certain that Colin did everything in Melbourne Draw, though there may have been some sketches. It's amazing what could be done without a drawing tablet, or even a mouse!"

As *Heartland*'s development progressed, Odin's operations were being scaled up to deliver the other games promised to Telecomsoft, which required relocation to bigger premises. "Odin moved office in the middle of development of the game," recalls Steve, "though it was not very far. It was across the courtyard in Canning Place to another unit – the old Bug Byte office, as it happens. The new office was much bigger, and we needed the space for the additional developers we would hire. It was literally across the breezeway from us, so we just carried our gear over one day."

Other than this break to change venue, work on *Heartland* was proceeding smoothly with the sprite technique at the game's heart performing almost perfectly. "The technique of generating the masks worked pretty well," Steve notes. "Occasionally, there'd be a 'hole' in the mask if more than a three-pixel gap existed in the original art, but it was usually a quick job for Colin to fix up the error. One difficulty was fitting everything into memory. Game characters could go behind background elements, not just each other. That was challenging as the dynamic masks had to be created for those elements too – and they were quite large in places."

Consideration was also being given to *Heartland*'s plot – which would be as enigmatic as previous Odin storylines. "It was very much a collaborative effort," Steve begins. "The graphics drove a lot of the back-story, certainly, but ideas came from all around. As each idea came up, we'd discuss ways to integrate that into the game. I'm sure there were ideas from other developers, and from Paul McKenna – our managing director. I think it is reasonable to assume that the main character is – or becomes – a wizard thanks to the magic he is exposed to. He is certainly following in a wizard's footsteps."

As *Heartland*'s main elements came together, title music was composed and cover art was created by local artist Gerry Fisher – which Colin based a loading screen on – as Steve recollects. "Keith Tinman did the music, I did the sound effects – such as they were. The music player was an evolution of previous code that we'd used in *Robin*. It was a two-channel player that made

DEVELOPER HIGHLIGHTS

NODES OF YESOD
(PICTURED)
SYSTEM: ZX SPECTRUM, COMMODORE 64, AMSTRAD CPC, ENTERPRISE 64
YEAR: 1985

ROBIN OF THE WOOD
SYSTEM: ZX SPECTRUM, COMMODORE 64
YEAR: 1985

THE ARC OF YESOD
SYSTEM: ZX SPECTRUM, COMMODORE 64
YEAR: 1985



» [ZX Spectrum] The picturesque village stage presents *Heartland*'s wizard with a pair of portals to choose from.

OTHER ODIN OUTINGS

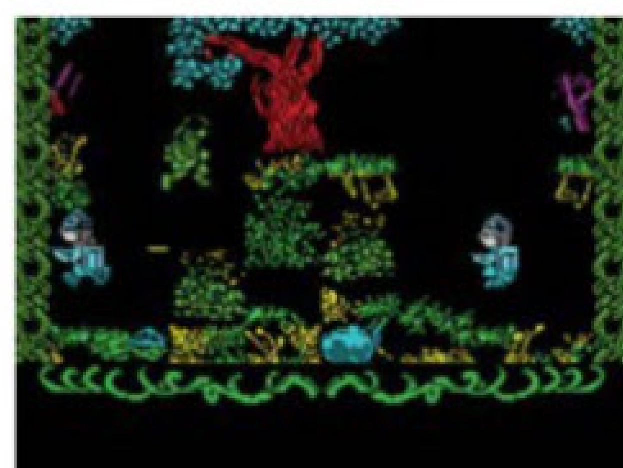
Steve Wetherill's other games for Odin Computer Graphics



NODES OF YESOD 1985

SYSTEM: ZX Spectrum, Commodore 64, Amstrad CPC, Enterprise 64

■ The first game Steve worked on for Odin – and Odin's first game – *Nodes Of Yesod* is a polished platformer set on the moon that was influenced by Ultimate's *Underwurlde*. A team effort, *Nodes* still plays well today.



ROBIN OF THE WOOD 1985

SYSTEM: ZX Spectrum, Commodore 64

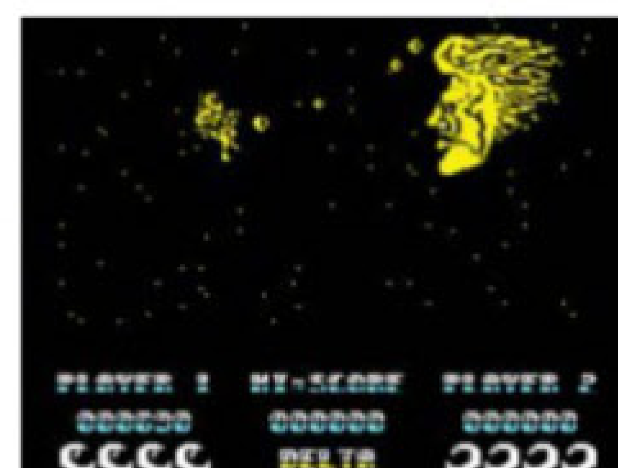
■ The one Odin game of Steve's that didn't feature pixel-art by Colin Grunes, *Robin Of The Wood* was artist Paul Salmon's baby. The game took inspiration from *Sabre Wulf*, but was still uniquely Odin.



ARC OF YESOD 1987

SYSTEM: ZX Spectrum, Commodore 64

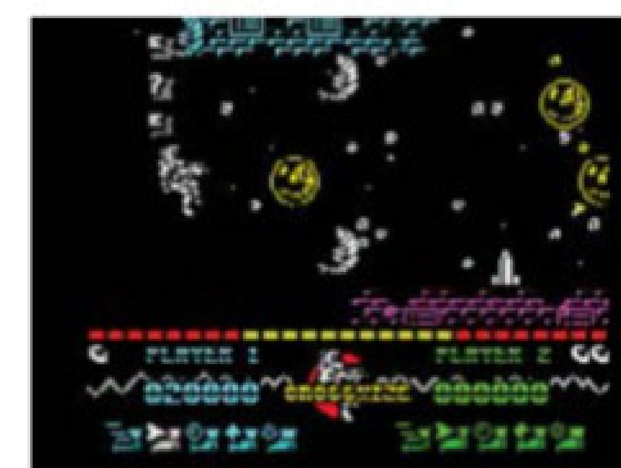
■ This budget sequel to *Nodes* was completed in double-quick time using its predecessor's software engine. Admittedly, it's more of the same. But when viewed as a refinement, *Arc Of Yesod* fulfils its remit nicely – it also looks better than *Nodes*.



SIDEWIZE 1987

SYSTEM: ZX Spectrum, Commodore 64

■ Now here's one that divided the critics back in the late Eighties. Basically, if you like pure shoot-'em-ups with extremely pretty visuals then *Sidewize* is for you. If not, then you may well not appreciate the game's simple charms.



CROSSWIZE 1987

SYSTEM: ZX Spectrum

■ Although *Crosswize* is not an Odin title as such, by all accounts Steve and Colin Grunes's follow-up to *Sidewize* is very much an Odin Computer Graphics game in spirit if not in reality. It also features far more colourful and varied graphics than the game it eventually succeeded.

use of the fact that the Spectrum beeper could actually output two levels, so you could play two notes at once. We didn't really have a good way of transcribing from musical keyboard to the game so I think there was lots of manual data entry involved. Gerry always did a fantastic job. He did the *Nodes*, *Arc Of Yesod* and *Robin* covers too. Colin did the loading screen, I remember him slaving away trying to get the attributes to line up with the hand and the planet!"

When released, *Heartland* reviewed extremely well with special praise being reserved for Colin's stunning visuals. "It's always nice to be appreciated!" Steve says of *Heartland*'s reception. "The game made an excellent impression due to the art from Colin."

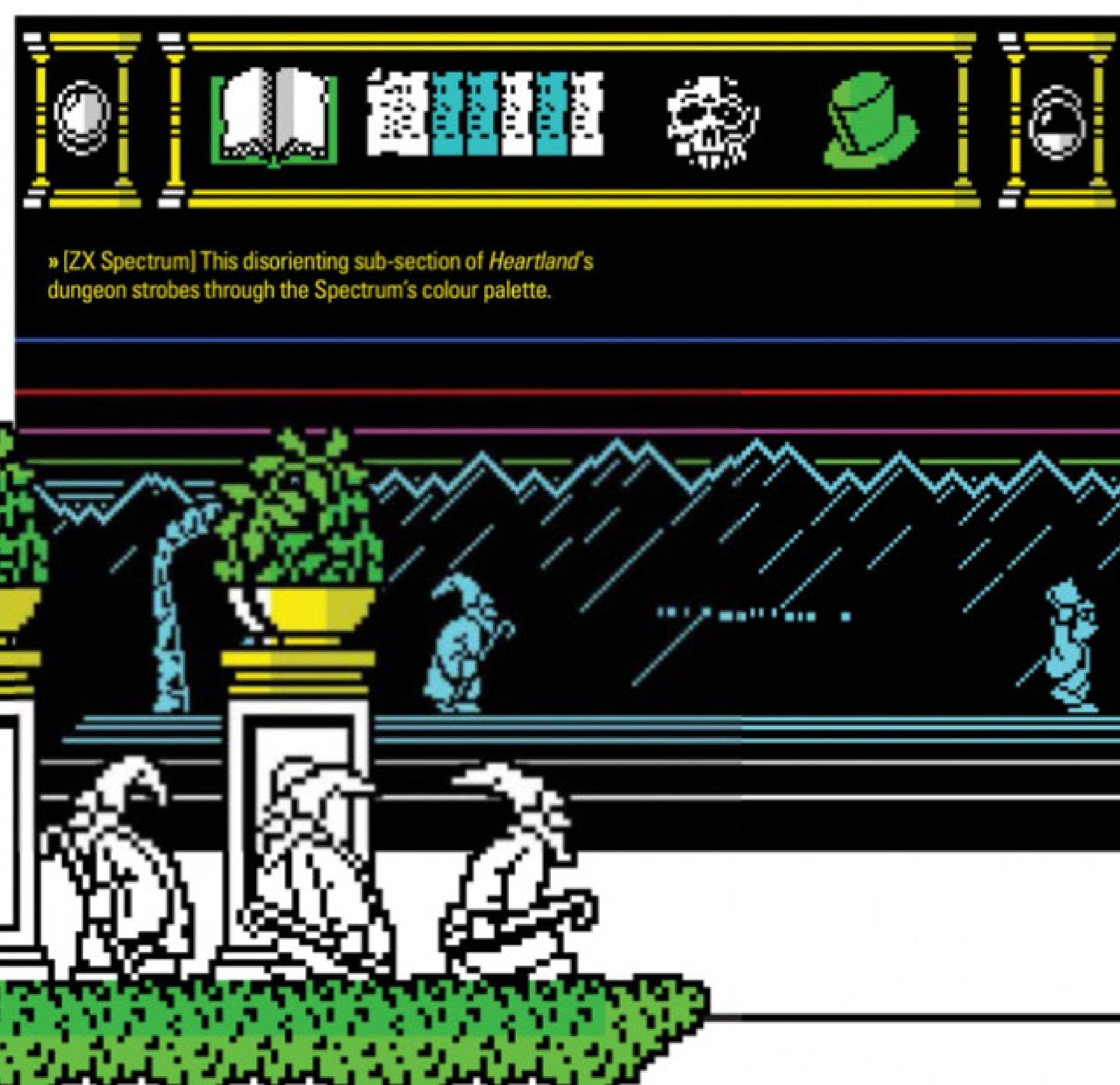
Of the trio of conversions that followed, Steve advised on the C64 port and developed Amstrad versions to fit new art. "I had very little involvement with the C64 version of the game, other than some input on the data structures and graphics organisation, and then to answer any questions that came up with the code. I did the Amstrad ports – both the cassette version and the disk version – and I had a lot of fun with that. I used Mode 0, which gave the game a chunky but very colourful look. I worked from home for a few weeks during this, and it was a very productive time. Colin did the art. I did everything else. Even though the screen aspect ratio was different on the CPC, I made all the existing room layouts work okay with minimal changes – much to Colin's relief! The Amstrad versions came together very quickly. I especially like them – the frame rate is higher and the game is more colourful."

On the effect the Telecomsoft deal had on *Heartland* and the other contracted games, Steve explains *Heartland*'s working title – 'Kimera' – was too similar to that of another Telecomsoft publication and that the contract provided the most pressure. "As far as I remember, they had very little input on the creative direction for *Heartland*. 'Kimera' was really just a working title. I believe there may have been another game with a similar name – *Chimera*. There was certainly pressure to complete games. We hired a bunch of people to help develop those ten titles, but it was hard to maintain quality and pace of development. What worked for one or two concurrent titles just didn't scale well to ten titles in a year. It definitely drove down the quality of the games, I think we were a bit naive trying to do good, fast *and* cheap."

On sequels, Steve reveals some unrealised plans. "After Odin had closed, Colin and I pitched a game called *Heart Of Yesod* to a few publishers. This was to be an Amiga and Atari ST game that brought the worlds of *Nodes Of Yesod* and *Heartland* together. It was something like *Nodes Of Yesod* meets *Heartland* by way of *Narnia* – there was a wardrobe involved – and *Mr Ben*. Needless to say, that game did not get funded."

Given the last word, Steve offers a modest appraisal of the Odin classic that acknowledges the great job done by his old partner. "Thanks to Colin's art, *Heartland* is a very pretty looking game. Certain aspects of the control scheme seem overly fiddly to my 2014 eyes, and I wish the game had more of a platform aspect to it, but I am happy with it."

Many thanks to Steve Wetherill for his time and for providing such detailed answers.



» [ZX Spectrum] This disorienting sub-section of *Heartland*'s dungeon strobes through the Spectrum's colour palette.

WIZARD WHEEZES

More games where you play as a wizard



THE WIZARD

MEMORABLE APPEARANCE: Atic Atac

Ultimate's *Atic Atac* also lets you play as a knight or serf, but who wouldn't choose to play as a wizard? And while the Knight's axe and, in addition, the Serf's sword are as effective as the Wizard's magic, the ability to cast spells is just cooler.



MAROC THE MAGE

MEMORABLE APPEARANCE: Dragontorc

Maroc first appeared in the arcade adventure *Avalon*, but the gameplay in its sequel, *Dragontorc*, is probably more accessible. For reasons unknown, Maroc's astral body remains cross-legged throughout both games and levitates to get around.



MERLIN

MEMORABLE APPEARANCE: Gauntlet

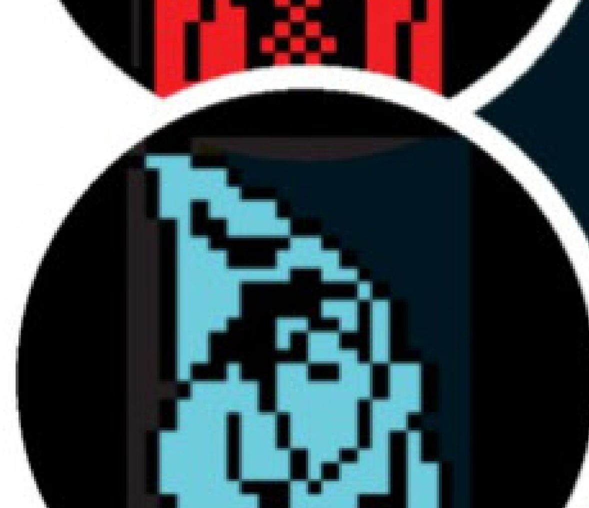
Ah, who can forget that immortal line from Atari's *Gauntlet* – "Wizard needs food – badly!" Greedy wizard. We're only joking, Merlin was always a popular choice among arcade-goers and looks quite dapper in his long yellow robes.



AXIL THE ABLE

MEMORABLE APPEARANCE: Heavy On The Magick

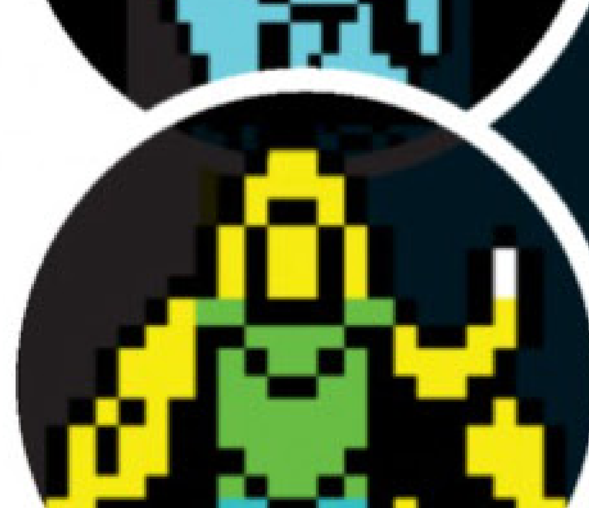
Some clever blending of the text adventure and arcade genres resulted in Axil The Able practicing the dark arts in Gargoyle's *Heavy On The Magick*. Axil's progress depends on conversing with various creatures of the night and summoning demons.



SABREMAN

MEMORABLE APPEARANCE: Pentagram

Khaki-shorted explorer, lycanthrope, wizard – where does Sabreman find these jobs? Regardless, 1986 saw him throw on some robes and a pointy hat in a quest to resurrect a mystical pentagram. He also learned magic and grew a beard.



ARCH MAGE

MEMORABLE APPEARANCE: Lords Of Chaos

An arch mage is the role you took in Julian Gollop's turn-based role-playing game, but your character was only one of the *Lords Of Chaos* – rival wizards existed and they wanted you not to. And let's not mention ferocious mythical creatures.



XAVIER PENDRAGON

MEMORABLE APPEARANCE: Eternal Champions

Technically a warlock, but wizardly enough to qualify, Xavier Pendragon used a mixture of magic and martial arts in Sega of America's Nineties Mega Drive beat-'em-up *Eternal Champions*. Xavier's speciality is Cane Fighting with a magic staff.

BIO

RoboCop is generally considered to be one of Ocean's best film licences; perhaps its best. Carefully emulating the actual film (with a bit of artistic licence) it's a fast-paced shooter that sees RoboCop stomping through the gritty streets of Detroit dealing out justice to anyone that strays into his gun sights. Widely acclaimed on all home computers at the time – we've an obvious preference for the Amstrad version – it's not a direct port of the arcade game (although the 16-bit conversions are more similar) but has its own distinctive identity. It also proved that when it came to capturing the magic of the movies, no company did it better than Ocean.

CLASSIC MOMENTS

RoboCop

» **PLATFORM:** VARIOUS » **DEVELOPER:** OCEAN » **RELEASED:** 1989

R*oboCop* works so well because Ocean nailed the anarchic atmosphere of the movie. It's a visceral delight that's not only full of humorous touches, but also features some of the film's greatest scenes.

This is no more apparent then when you take part in the mini-game waiting for you at the end of stage one. You immediately encounter a woman who is being held at knifepoint by an attacker. Unlike the previous level, which was a typical side-on scroller, the action utilises a first-person perspective and you must use your gun sights to take out the nasty thug.

If you've got enough energy you can simply shoot through the human shield and take him out, but you're playing as RoboCop and that would be in direct violation of his second directive. So instead you time your moments and shoot when the opportunity presents itself. It's tense, tough and amazingly well done. If you really want to show off you can aim directly for his nuts by shooting through her legs. Your move, creep. *

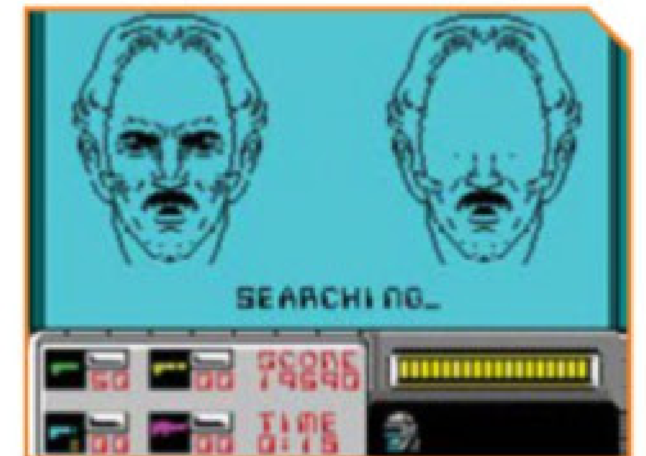
MORE CLASSIC ROBOCOP MOMENTS

"Nice shooting son"



There are a large number of different weapons in *RoboCop*, making it tremendously easy to clear up the streets of Detroit. While the three-way shot is extremely useful, it's not quite as satisfying to use as the Cobra Assault Cannon. It makes a big impact in the film and is equally impressive during the game, firing a huge plasma bolt that destroys anything it comes into contact with. Brutal.

"Can you fly Bobby?"



Complete *RoboCop*'s second stage and you're treated to another mini-game that adds tremendously to *RoboCop*'s atmosphere. This time you're trying to get a photofit of criminal Emil Antonowsky so you can bring the crook to justice, RoboCop style. An image of Emil appears on the left and you must then flick through different face parts in order to get a match. It's another great moment captured by Ocean.

"You are under arrest"



The arcade game's first level ends with you having a showdown with ED-209. Things are far more spectacular on the 8-bit versions – you're unable to apprehend CEO Dick Smith on level four, so must take on his metallic bodyguard with just your fists. Fine, except a weaponless RoboCop walks like he's constipated, creating an unintentionally silly moment for such a dramatic encounter.

"Dead or alive, you're coming with me"



RoboCop is hard, there's no escaping it. He is, after all, part man, part machine – all cop. In fact he's so hard that even motorcycles don't faze him. While it's perfectly possible to shoot the large hogs as they ride towards him, punching produces far more entertaining results. Time it correctly and your punch will immediately destroy a bike, allowing you to savour your hardness as its wheels fly off-screen.



The Ultimate guide to...

MIDNIGHT RESISTANCE

If you've ever wondered what to do when your family is kidnapped by a giant floating head, Midnight Resistance has the answer – grab your guns and slaughter scores of bad guys. Nick Thorpe is your guide to the carnage

Weapons research can be a pretty dangerous field in times of war. One minute you're developing weapons for the defence of your homeland, the next you're working for your captor to further subjugate your own kind. Such is the fate that has befallen the grandfather of our heroes in *Midnight Resistance*. But Data East decided that this wasn't a bad enough situation, so your grandfather hasn't just been captured by an opposing army – your whole family has been taken hostage, and the army is under the leadership of a megalomaniac scientific genius known as King Crimson. Oh no! Luckily, our protagonists are muscle-bound Eighties action heroes, armed to the teeth and ready to embark on a rescue mission.

Midnight Resistance is a run-and-gun platform shoot-'em up that arrived in 1989, directed by Koji Akibayashi. Previously serving as a character designer, Akibayashi made his debut as a game designer with *Heavy Barrel* in 1987, a top-down shooter that was clearly inspired by *Ikari Warriors*. While the choice of genre and use of a rotary joystick gave away the game's source of inspiration, it had a few unique elements of its own. Chief among these was the ability to collect keys dropped by defeated enemies, which could then be used to open chests for various power-ups.

In much the same way, *Midnight Resistance* is evidently influenced by the success of Konami's *Contra*, sharing not only a genre but the 'beefy guys in vests' aesthetic. However, much like *Heavy Barrel*, *Midnight Resistance* brings its own unique twist on the genre – quite literally, thanks to the game's use of a rotary joystick. The majority of games in the genre, *Contra* included, only allow the player to fire in the direction that the player is facing. *Midnight Resistance* has no such restriction, as the rotary joystick allows the player to aim independently of their direction of movement, an ability that becomes

PIXEL PERFECT

Everyone you've got to rescue, and the bad guys trying to stop you


Dad

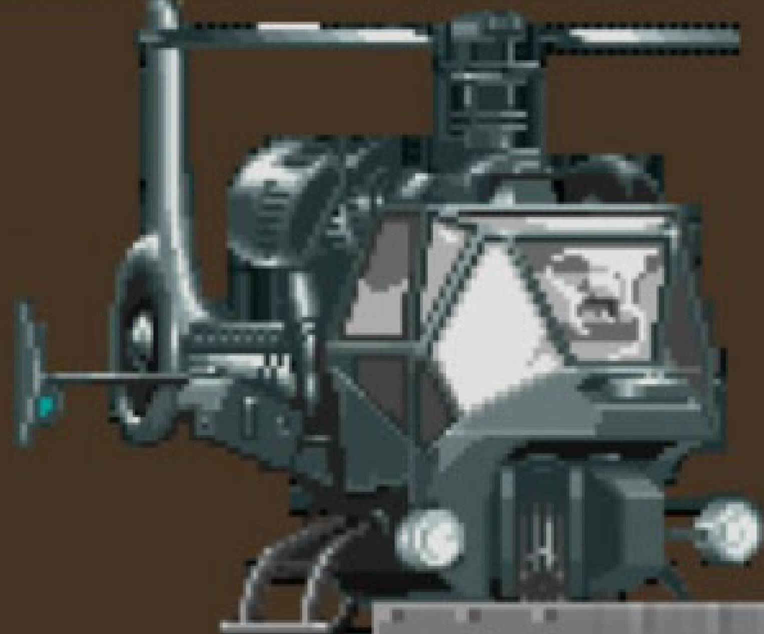

Mom


Grandfather


Grandmother


Brother


Sister


Helicopter


Crimson King Block


Green Soldier


Yellow Soldier


Flying Soldier


Jeep


Mortar

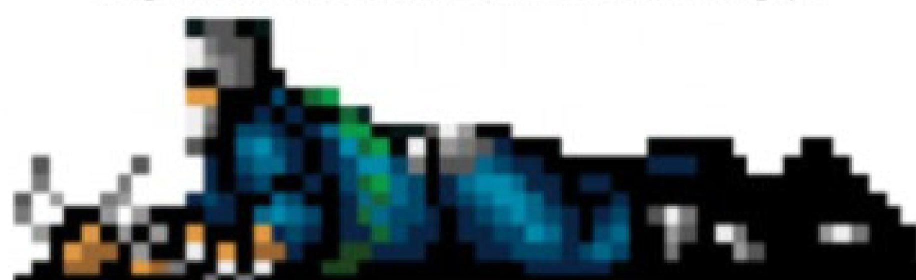

Tank

> "WE DECIDED AGAINST DOING TWO CONTROLLERS AS NOT EVERYONE HAD ONE JOYSTICK, LET ALONE TWO!"
> Jim Bagley

crucial as enemies begin to attack from all directions very early on.

Returning from *Heavy Barrel* is the key-based power-up system. Regular grunts will often drop keys, up to six of which can be carried and spent at the armouries visited at the end of each stage. The main guns are staples of the genre, from the utility of the three-way gun to the devastating power of the flamethrower, but each player can also equip a secondary backpack weapon. Fired by pushing Up and Fire together, all three backpack weapons are capable of doing massive damage over a wide area, but come with much less ammunition than your primary guns. Thankfully, losing a life doesn't necessarily cause you to lose your power-ups – keys and weapons are dropped upon death and can be collected again, alleviating the frustration caused by deaths in other games in the genre.


» [Arcade] Running alongside the jeep in the opening stage. You can also ride on it and mow down bad guys.



Midnight Resistance is one of Data East's most visually impressive games of the late Eighties, displaying some fine examples of excellent background work, particularly in the early stages of the game with the cityscape renders. The game uses very large enemies liberally from an early stage of the game – tanks in particular are a recurring threat, while the bosses include gigantic buzzsaws and a battleship that stands defiant at three screens wide. There are some excellent set pieces, too – the opening jeep sequence is short but vital, the ambush by flying soldiers as you ride stage three's elevators is massively tense and the helicopter attack in stage five is similarly so.

ROTATION NATION

Midnight Resistance was one of a glut of rotary joystick games to arrive in the late Eighties – here are six more to try



Ikari Warriors 1986

While SNK's *Commando* rival wasn't the first game to use a rotary joystick – *TNK III* took that honour a year prior – it was the game that popularised the control method, allowing players to move and shoot in different directions. Multiplayer sweetened the deal, ensuring the game's success.



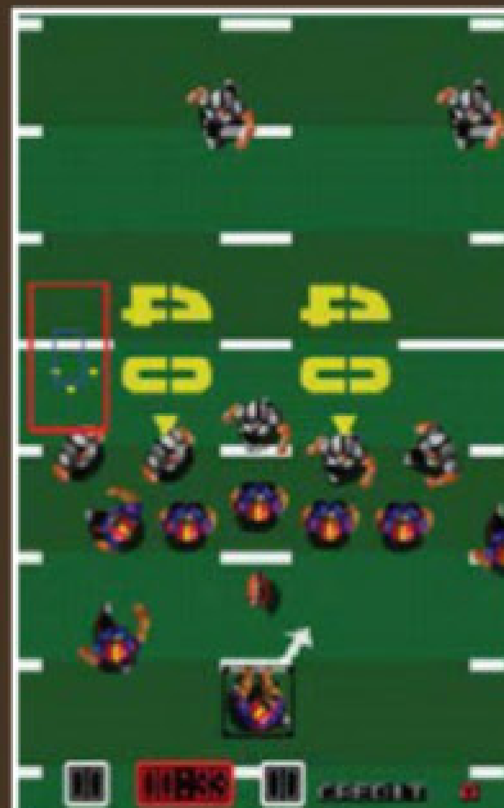
Heavy Barrel 1987

The success of *Ikari Warriors* didn't go unnoticed by other developers, and Data East released this competitor the following year. The game was named after its signature weapon, which could take out almost every enemy in the game with a single shot, but had to be assembled from six parts. Its power-up system was adapted for *Midnight Resistance*.



Bermuda Triangle 1987

Having popularised the rotary joystick with *Ikari Warriors*, SNK looked for ways to implement the control method outside of the *Ikari* formula. *Bermuda Triangle* was a conservative attempt – a formulaic vertical shoot-'em-up with the addition of rotary aiming.



Touchdown Fever 1987

Touchdown Fever was another attempt to broaden the use of the rotary joystick. The controls allowed players to aim throws while running in a different direction, allowing the quarterback to evade defenders while lining up the perfect pass.



Downtown 1989

Seta was late to the rotary joystick field, utilising them as they began to drop out of fashion. *Caliber 50* was another *Ikari Warriors* imitator, but *Downtown* was more interesting – a top-down beat-'em-up. It might have benefited from a conventional control scheme…



Exterminator 1989

This bizarre release put players in control of a disembodied hand and tasked them with ridding a house of various insects. The rotary stick was used to aim while shooting. While it looked great, extensively utilising digitised graphics, the unusual premise and requirement for a dedicated cabinet put arcade operators off. As a result, manufacturer Gottlieb never tried anything like it again.

> "WE PLAYED IT UNTIL WE COULD GO THROUGH AND COMPLETE IT EVERY TIME"
> Jim Bagley

Midnight Resistance boasts some memorable sounds, too. Azusa Hara and Hiroaki Yoshida, the sound team responsible for *Heavy Barrel*'s excellent audio work, were joined by Tatsuya Kiuchi and Hitomi Komatsu and together delivered another outstanding piece of work. The voice work is good – we're particular fans of the gruff voice that exhorts you to pick a weapon in the armoury – but the music is the clear star of the show here. Each of the game's main themes is well composed and evokes the feeling of a desperate mission, while the boss themes lend a particularly frantic air to the battles themselves. In fact, the quality of the soundtrack does well to cover up the fact that there's so little of it, with just three main background tunes and four boss themes.

The popularity of *Midnight Resistance* ensured a variety of home conversions, the majority of which were home computer conversions licensed by Ocean and developed by Special FX. Lacking the rotary joystick of the arcade version and limited to a single fire button, the developers had to get creative. The Commodore 64 version reverted to firing only in the direction the player was holding, while the ZX Spectrum and Amstrad CPC versions allowed the player to hold the fire button to stay on the ground while adjusting aim. The Amiga and Atari ST versions allowed the player to hold the button to adjust their aim, but without the useful autofire that the Spectrum version offered. However, the Amiga version had a trump card – it was the only one of the home versions to include a multiplayer mode. King

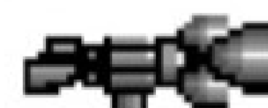


» [Arcade] This cannon is one of the game's memorable bosses, appearing only once in the forest stage.



» [Arcade] The battleship is another of the game's more impressive bosses, stretching over three screens.

INSTRUMENTS OF WAR



3-Way
A classic spread shot



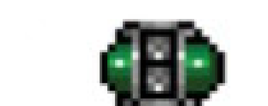
Fire
A nifty flamethrower



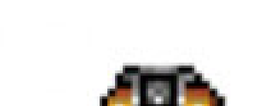
Full Auto
A rapid-fire machine gun



Shotgun
Fires high-impact shots



Homing
A burst of useful homing missiles



Nitro
An eight-way burst of flame



Shower
A line of shots rain down from above



Barrier
A trio of satellites that orbit the player

» [Arcade] Swooping around the periphery of the screen, the flying soldiers can cause many a lost life.



JIM BAGLEY



Programmer, ZX Spectrum and Amstrad CPC conversions

How did you get the *Midnight Resistance* gig?
I was working for Special FX at the time and we had just finished *Cabal*, so Ocean gave us our next arcade game to port, *Midnight Resistance*! Back then, our thoughts on how projects were chosen was that it was either due to the guys at Ocean not wanting to do a particular conversion themselves, or that it was just the next conversion rights they had got in, and because we were now free after completing the last one.

Had you played the game much prior to working on it?
To be honest, I hadn't heard of *Midnight Resistance*, or *Cabal* for that matter, before I was given them to do. I have played both of them a lot now that I have both PCBs, and my daughters also like playing them too! Although with *Midnight Resistance*, I really should make a proper control panel for the rotary joystick…

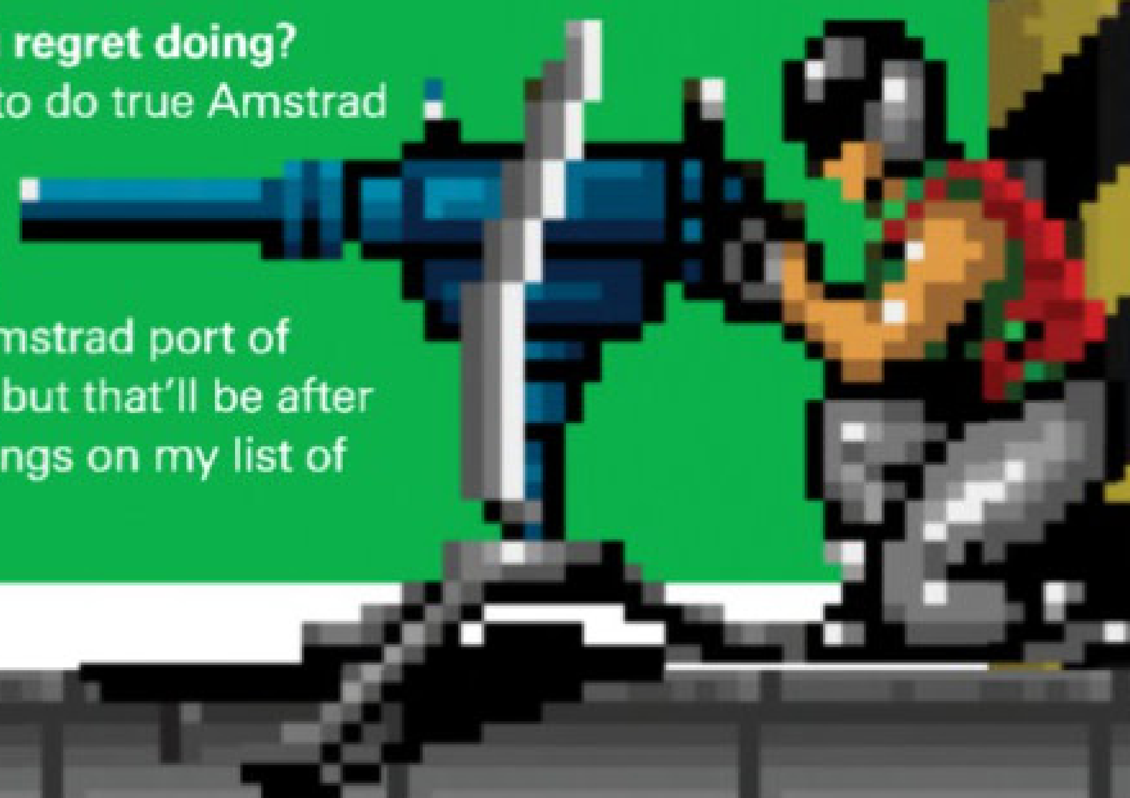
How did you try to implement *Midnight Resistance*'s innovative control system?
We quickly decided against doing two controllers as not everyone had one joystick, let alone two! And to make it keyboard only using 16 keys for directions would have made it just uncomfortable to play and not joystick friendly, so we made it just hold the fire button to then rotate the gun around, which I think turned out to be the best solution overall.

How long did the project take and what was the biggest technical obstacle?
It was typically three months from start to finish on projects, giving us time to get to play the game to the point where we could complete it. Thankfully it was set to free-play! Basically we played it until we could go through and complete it every time, allowing the artists to be able to map out the levels, and baddies and baddy placements.

The biggest technical obstacle was that I wanted to make sure we fit in *everything* that was in the arcade game, from all the weapon power-ups, and masses of bullets on screen, to all the cutscene sections and the nice end of game sequence!

How do you think your conversions hold up today?
As a Spectrum game, it still stands up quite proud, as a lot of retro fans have said to me how great a game it was and still is!

Is there anything you regret doing?
Yes, not having time to do true Amstrad conversions of the arcade. I have on my bucket list to one day do a 16-colour Amstrad port of *Midnight Resistance*, but that'll be after finishing the other things on my list of games to remake!



COIN-OP CONVERSIONS

Midnight Resistance has a relatively modest number of conversions – which of the six should you seek out?



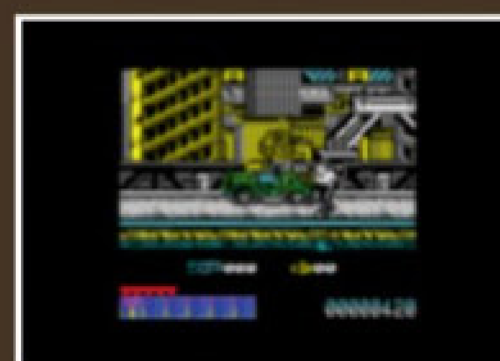
Commodore 64

Of the six home conversions of *Midnight Resistance*, the C64 version is the one with the least visual detail. However, the system's strengths in other areas show – scrolling is smooth and the SID chip delivers a great rendition of the game's music. Despite simplifying some sections and omitting others it's faithful and ranks as one of the great C64 arcade blasters.



Amiga

The Amiga conversion boasts the most faithful appearance, and while there are some small alterations to level design and enemy behaviour, it plays well. Better yet, it's the only version to include multiplayer. If we had to pick holes, we'd note that the visuals are a tad dark and some of the music is disconcertingly soft.



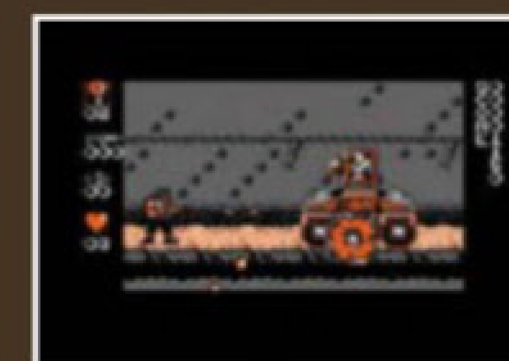
ZX Spectrum

The ZX Spectrum conversion wisely goes for a different look to the arcade game, helping sprites to stand out against the detailed backgrounds. While it doesn't boast the smooth scrolling of its C64 counterpart, the additional sprite detail is appreciated and the music on the 128K version is excellent.



Atari ST

Joffa Smith's Atari ST conversion is differentiated from the Amiga version by some weaknesses. The smooth scrolling of the Amiga version is replaced with less attractive block scrolling, and while the Amiga allows the player to choose between music and SFX, the ST version has no music at all.



Amstrad CPC

The CPC is, as was so often the case, lumbered with a cut-down Spectrum port. Running in the system's high-resolution mode restricts the game to using only four colours. It also has no in-game music at all. It still plays well, but Jim Bagley wants to revisit this conversion one day and we can see exactly why he does.

Mega Drive

The Mega Drive version of *Midnight Resistance* was the only one handled by Data East and while it plays well, there are some weaknesses. The level design is highly accurate and the controls are first-rate thanks to the three-button pad, while Hitoshi Sakimoto worked wonders with the Mega Drive's sound hardware. However, the visuals are surprisingly weak.




» [Arcade] Our hero is caught between a rock and a hard place – or in this case, a helicopter and electric barriers.

> “ I REALLY SHOULD MAKE A PROPER CONTROL PANEL FOR THE ROTARY JOYSTICK… ”
> Jim Bagley

▶ Crimson was renamed to The Commissar in Ocean's versions, a feat made possible by the paper-thin plot of the arcade game.

The other version is the Mega Drive version, which is unique in that Data East handled it in-house. Thanks to the console's three-button controller, control is a little smoother than on the computer versions. It still didn't recreate the rotary controls of the original, but provided a button to fix aim, allowing players to move freely while maintaining their intended direction of fire. Bizarrely, the plot in the North American manual managed to change the majority of what little story had existed before. Renamed the Crimson King, our villain was a drug lord who kidnapped the protagonist's grandfather for his work on a serum that would prevent the effects of drug addiction. Luckily, our hero – now known as Johnny Ford – was a member of the Narcotics Control Agency.

Though Data East titles have occasionally been re-released since the demise of the company in 2003, *Midnight Resistance* hasn't seen an official release on any modern systems, leaving the six contemporary conversions as the main way for players to experience the game. It's a real shame – while there's still nothing out there that would correctly emulate a rotary joystick, we could see the game working rather well on modern controllers that have two analogue sticks as standard. Until the day when we finally get such an authentic version of *Midnight Resistance*, any of the existing versions should prove perfectly capable of keeping you up late. ✱


» [Arcade] Despite functioning as a mini-boss in the first stage, these tanks soon become commonplace enemies.


» [Arcade] Here's the armoury – each hole beneath a weapon represents its cost in keys.

BOSS RUSH

How to withstand the fearsome firepower of King Crimson's forces

Missile Tank

Your first proper boss is a wide tank with a double set of treads, which trundles left and right firing missiles up the screen from various points along its body. It's a little tougher than the standard grunts and tanks you've faced up to this point, but is fairly easily dispatched once you're acquainted with the correct tactics.

How to beat it

Attacking from the top can be dangerous, so try getting underneath it and firing into the middle section from below. It'll take longer, but if you're able to keep up with its changes of direction it's the safest method.



DIFFICULTY RATING 2



DIFFICULTY RATING 3

Buzzsaw Robot

After making your way through a heavily wooded area, five deadly buzzsaws burst through the foliage. Defeating these reveals the one-eyed robot behind the attack, along with two more giant buzzsaws on tracks. It's a bizarre contraption in King Crimson's arsenal, but one that shouldn't pose a huge threat to our heroes due to its predictable attack patterns.

How to beat it

Shoot the buzzsaws to destroy them, before taking out the central eye. Take advantage of the limited movement range of the buzzsaws, but be careful when timing your escapes from the corners of the screen against the larger ones.



DIFFICULTY RATING 4

Fighter Jet Squadron

King Crimson gets serious, throwing a squadron of ten fighter jets at you. They're as speedy as you'd expect, flying across the screen in alternating directions. Every so often the squadron will make a background fly-past, showing you how many jets are left. Their impressive speed makes them harder than previous bosses, but they're still fairly simple to take out.

How to beat it

The tricky part is avoiding the missiles – they always drop diagonally, so running away will give you extra time to jump. Weapons that don't require accuracy, like the three-way and homing missiles, are best for taking out the jets.



King Crimson

It's the big bad himself – an enormous floating head, warped by science. After attempting to block your path with images of his own face, he joins the fight himself, vomiting worms and brains at you. Even when reduced to just a brain, he keeps attacking. He's not the game's hardest boss, but is by far the most disturbing.

How to beat it

Blast him to remove his mask, while dealing with the fodder he spews out. Once that's off you'll need to aim for his eyes. The final form is weak and takes fire all over.

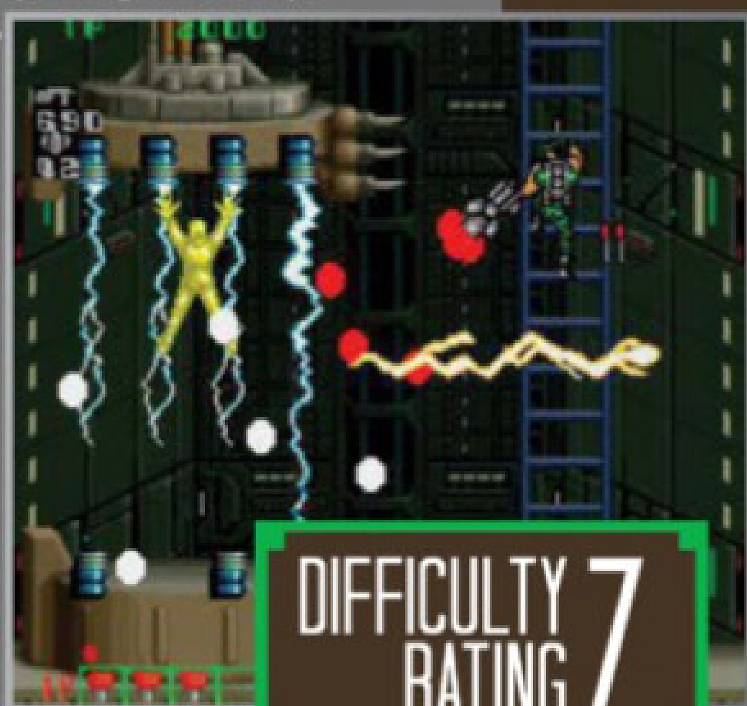
DIFFICULTY RATING 5

Supercharged Soldier

Descending the ladder inside an industrial facility, you'll find this human weapon waiting at the bottom – and he's the sternest challenge in the game so far. He floats up and down through his electric pod, letting loose with blasts of electricity. Complicating matters, the lack of platforms means that our heroes are reliant on the ladder, hampering mobility.

How to beat it

Take out the electricity beams by destroying the generators at the top and bottom of his pod. You'll eventually need to risk the ladder, but the top and bottom of the screen provide safe points to take out some generators.



DIFFICULTY RATING 7

DIFFICULTY RATING 8



Gauntlet Of Gears

Two lethal gears rotate at different speeds around a larger central gear, which moves left and right across the screen. Destroying the main gear rewards you with a near-impenetrable swarm of regular grunts, followed by two more sets of gears. Triumph here rewards you with another enemy swarm and a near-unavoidable three sets of gears.

How to beat it

Trios of gears are damaged by shooting the large central gear. Try to concentrate your fire on one set on the second and third runs, to remove them early. Remember that you can crawl beneath the smaller rotating gear.

Battleship

Moving into the final portion of the game, you're faced with the daunting sight of a gigantic battleship. It's three screens wide and boasts 20 turrets – three missile launchers on each end and 14 guns in the centre. Luckily the missiles are easy to dodge, so quick-fingered players stand a chance of taking this one down.

How to beat it

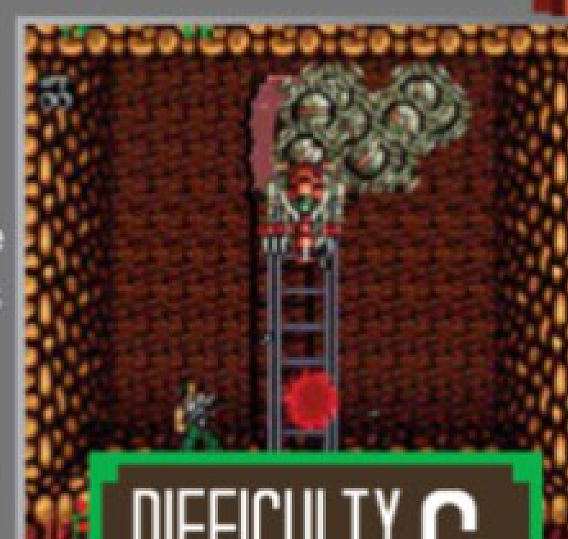
This boss is a long one, maximising your chances of making a mistake while trying to avoid missiles and bullets. You'll need to remove every gun on the ship – they don't defend themselves, so just keep shooting at them.

DIFFICULTY RATING 4



Flying Turret

The game's penultimate boss takes the form of a floating gun turret, followed by a trail of centipede-style segments. It aims some large shots at you and is one of the game's trickier bosses as a result, but it's the only thing standing between you and your kidnapped family. This is no time to give up the fight!



DIFFICULTY RATING 6

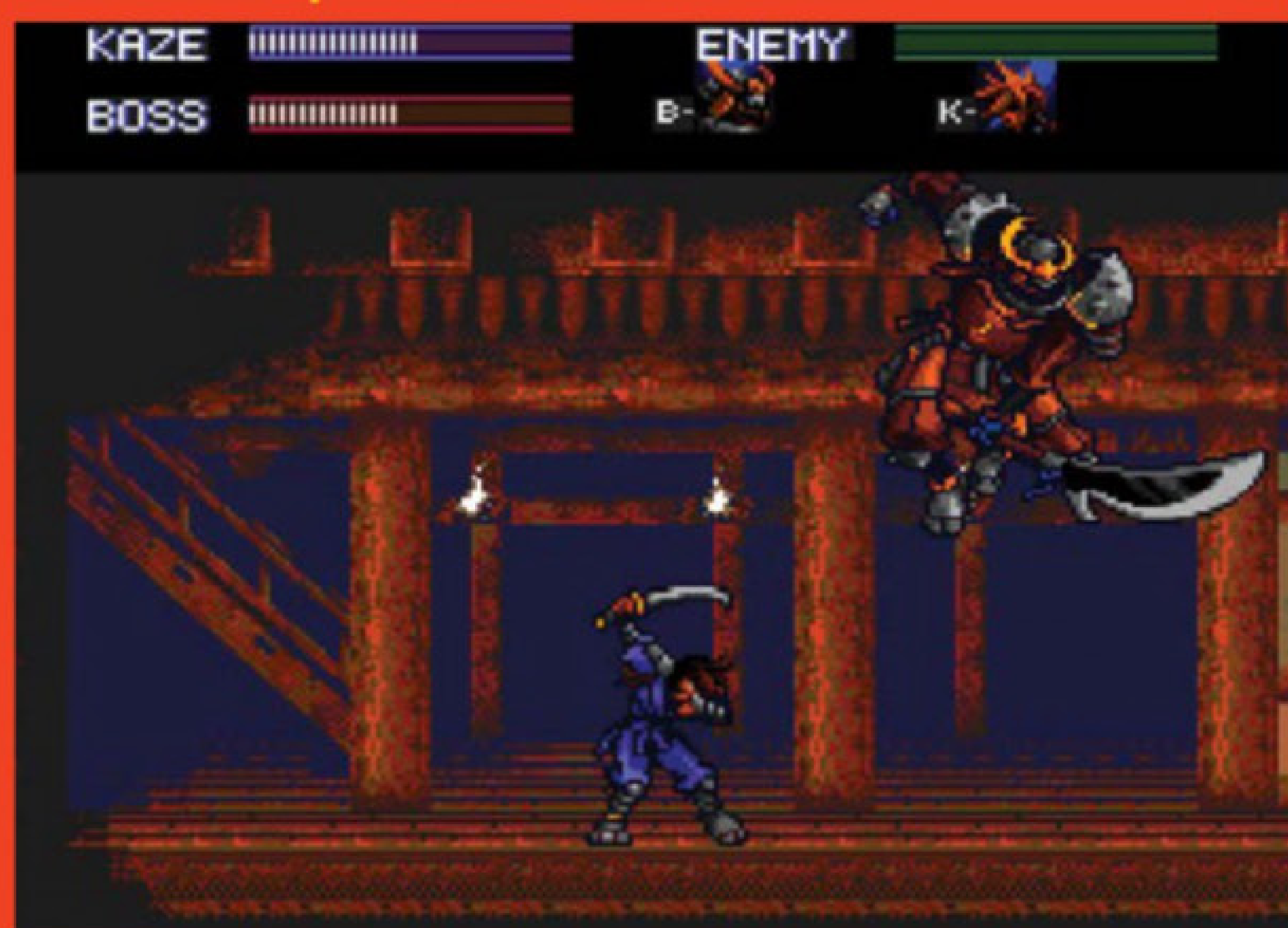
How to beat it

Avoid using your secondary weapons near the ladder, as you'll end up climbing it and reducing your mobility. Concentrate your fire on the head – shooting the tail won't get you anywhere. When the turret drops to the floor, get ready to jump!

Minority Report



Japanese developers have often looked to the archetypes of their homeland's past for inspiration, especially when designing games for their domestic market. Rory Milne looks at some memorable titles featuring samurai, ninja and other Japanese warriors



» [PC Engine CD] *Kaze Kiri*'s world closely resembles the one inhabited by the ninja of old.

KAZE KIRI

■ DEVELOPER: NAXAT SOFT ■ YEAR: 1994 ■ SYSTEM: PC-ENGINE CD-ROM

■ **Released late in the life of the PC Engine line, *Kaze Kiri* has the deserved reputation of being a lost gem.** The relative rarity of this high-tempo import-only scrolling hack-and-slash has led to the game demanding high prices on online auction sites, which has only added to the title's allure. *Kaze Kiri*'s reputation, though, like that of certain other Japanese gaming rarities, is something of a double-edged sword. Simply put, expectations of *Kaze Kiri* have been raised so much higher than they would have been had the game enjoyed a high-profile Western release. That's not to say that *Kaze Kiri* isn't without its charms. In fact, it excels in many areas, and if you go into it expecting arcade thrills rather than deep or innovative gameplay then you won't be at all disappointed by this game.

As mentioned, *Kaze Kiri* is a scrolling beat-'em-up, with Kaze Kiri being the name of the lead character. The game plays out against detailed renditions of traditional Japanese locations and backdrops that suggest the title is set in feudal Japan, but some of the lieutenants and bosses Kaze faces wear armour that looks decidedly high-tech. Regardless of its setting, the game's bosses are a high point and represent a showcase of outlandish mystical powers, martial art styles and weaponry. Just as intense are the title's hordes of minions, which launch evermore coordinated assaults as you progress from one level to the next.

Given the relentless nature of the game, it's fortunate that Kaze's talents include blisteringly fast swordplay and shuriken throwing, and a seemingly limitless move-



» USAGI NA PANIC

■ DEVELOPER: NIHON SOFTEC ■ YEAR: 1995
■ SYSTEM: PC-9801

■ **The 'bunny girl' may** be a US invention, but Japanese culture has co-opted the concept. This affection extends to games, and some even have bunny girls as their protagonists. Victor Entertainment's *Keio Flying Squadron* trilogy is a better-known example, but of equal note is Nihon Softec's *Usagi Na Panic*. The player's character in Nihon's scrolling platformer, Ramy, fights opponents such as penguins with a shortsword. To make progress, though, you have to master a dash attack and always look where you leap. This gameplay is unforgiving but not impossible. *Usagi Na Panic*'s cute sprites are well defined and its tunes suitably playful.



» SHINREI JUSATSUSHI TARŌMARU

■ DEVELOPER: TIME WARNER INTERACTIVE
■ YEAR: 1997 ■ SYSTEM: SATURN

■ **Another Japanese rarity** known for fetching high prices, *Tarōmaru*'s interesting combat mechanics are equally noteworthy. It's basically *Shinobi* with sprites over polygon backdrops, but the game's heroes have an unusual method of attack. *Tarōmaru*'s medieval Japanese world has two lead characters that fight with physic powers rather than martial arts moves. You battle demons, monsters, ninja and samurai – which favour physical attacks – but you fight back with a floating cursor that launches an attack on those you target.



» SON SON II

■ DEVELOPER: NEC AVENUE ■ YEAR: 1989
■ SYSTEM: PC ENGINE

■ **Like its Capcom** coin-op predecessor, *Son Son II* is based on the novel *Journey To The West* – which inspired the TV series *Monkey*. Those familiar with the book or series will guess that the game gives the player a monkey-boy with a magic staff to fight through its colourful side-scrolling stages with. There's also a fair bit of platforming required, and as Son Son's staff has a short range jumping around is often immediately followed by a face-to-face encounter with an opponent. To help with its end-of-level bosses, *Son Son II* provides a useful trading mechanic where collectable food can be exchanged for magic spells and staff power-ups.



» ABOUT NEC PC ENGINE

- NEC's PC Engine was developed with Hudson Soft and released in Japan in 1987.
- The PC Engine followed the naming tradition of NEC's home computer line, which started with 1979's PC-8001.
- Various enhanced PC Engine variants followed until the series was eventually superseded by the PC-FX in 1994.

PC Engine photograph courtesy of Bryan Ochalla.


» [PC Engine CD] Kaze's seemingly limitless move-set includes high-speed interchangeable flips.


» [PC Engine CD] Hordes of minions launch coordinated assaults as you progress through *Kaze Kiri*'s levels.


» [PC Engine CD] There are a wide variety of different enemies to defeat, including some great bosses.

set that sits somewhere between acrobatic and balletic. Kaze's moves, sheer speed and lightning reactions allow the player to launch devastating attacks on his opponents by stringing together lethal combinations of dashes and slides, interchanging flips and back-flips, and performing throws and flying kicks.

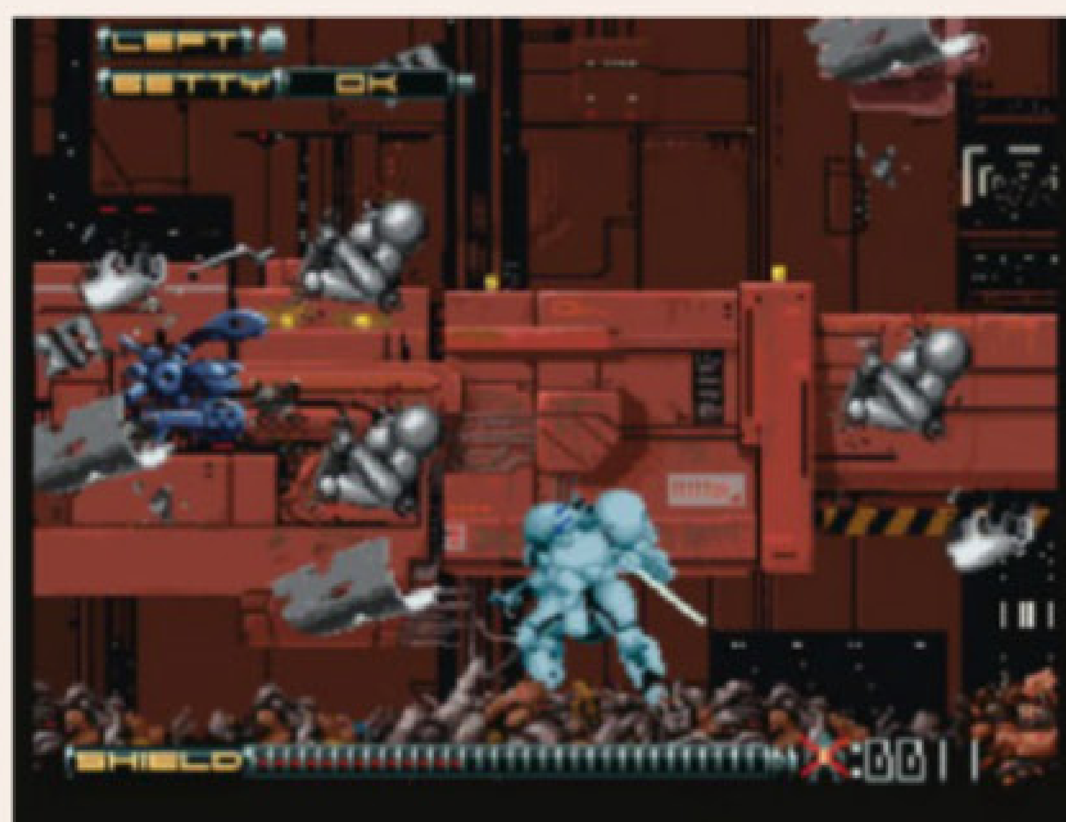
Perhaps because of Kaze's appearance – and the obvious ninja-connection – *Kaze Kiri* is sometimes compared to Capcom's *Strider*, but this is misleading. Firstly, the titles are styled very differently; while *Strider* overwhelms the player with one stunning set piece after another *Kaze Kiri* is more linear and layers sound effects to build up a foreboding atmosphere. And in terms of storyline, where Strider Hiryu's ninja-stylings give him the appearance of being a stranger in a very strange land, Kaze's story is set in a world far closer to the one inhabited by the ninja of old than one inspired by a fantastic futuristic take on the ninja mythos. Lastly, where *Strider*'s visuals have a technicolor look *Kaze Kiri* favours a muted palette for its sprite and pixel art.

These subdued graphics are a good fit for the game's low-key soundtrack, which sometimes even fades to complete silence to allow the clash of metal on metal or a quiet breeze to have more impact. This subtle presentation provides a clever contrast to the game's frenetic non-stop violence, but *Kaze Kiri*'s greater achievement is that its controls are so responsive that you always feel like you're directing the action rather than playing a bit part.

Kaze Kiri perhaps doesn't quite live up to the hype generated by its rare status and price tag – its gameplay will lack variety for some – but it is an undeniably stylish game that deserves greater exposure.



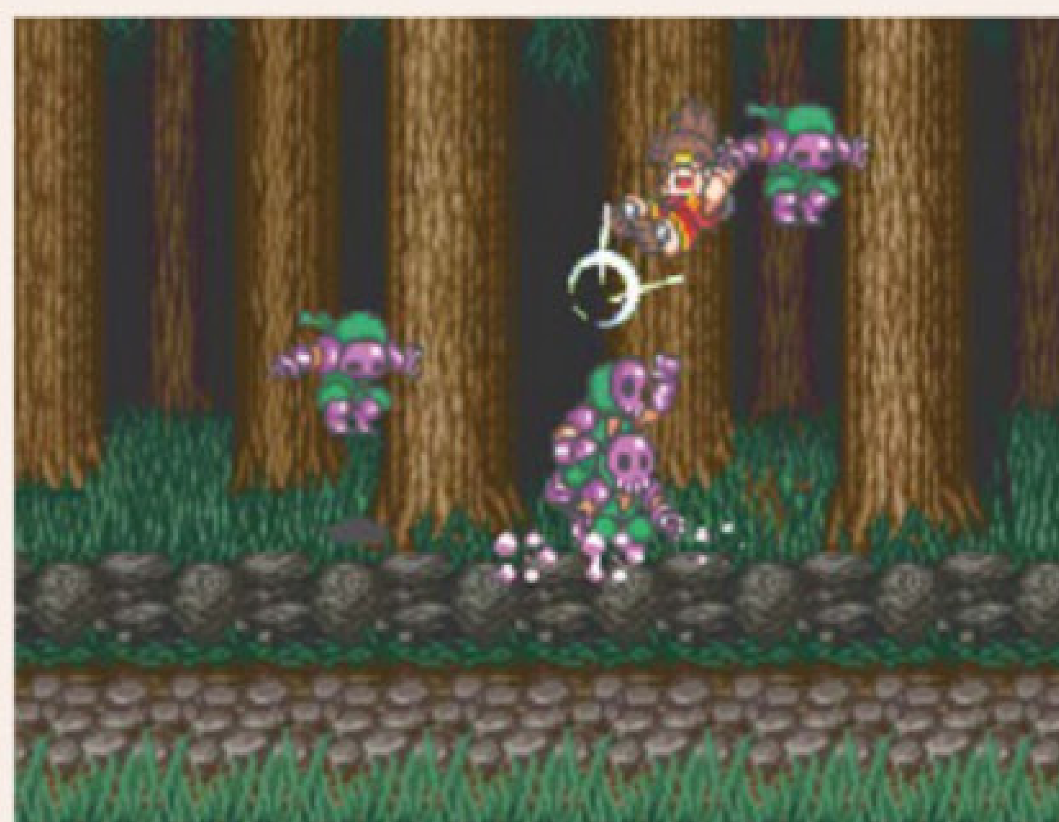
» [PC Engine CD] *Kaze Kiri*'s bosses represent a showcase of mystical powers, martial arts and weaponry.



» GENOCIDE 2

■ DEVELOPER: ZOOM INC ■ YEAR: 1991
■ SYSTEM: SHARP X68000

■ **This sequel to** Zoom Inc's *Genocide* takes the basic mechanics that made the first game so much fun and puts them in a title where everything happens on a far grander scale. Added to the original's gameplay are platforming sections and interchangeable weapons. The sequel's sprites are more detailed, its antagonists more varied and its animation smoother. Its boss-fights are also far more impressive, with some encounters feeling more like set pieces. In fact, *Genocide 2* is far more filmic in general, but while its stages are treated like scenes in a movie the brawling is just as relentless as that found in *Genocide*.



» SHOUNEN NINJA SASUKE

■ DEVELOPER: SUNSOFT ■ YEAR: 1994
■ SYSTEM: SUPER FAMICOM

■ **Often described as** playing like Technos' *Kunio-Kun* beat-'em-ups and resembling Konami's *Ganbare Goemon* titles, the feudal Japan-set *Shounen Ninja Sasuke* actually has its own unique feel. Sasuke – the ninja you play – starts the game with a pretty decent move-set including a dash attack, flying attack and kick, but you can later claim the weapons or spells of defeated enemies. You really need to make the best of Sasuke's abilities as the game keeps you busy with mobs that attack en masse and remorseless lightning-fast bosses.



» VALIS: THE FANTASM SOLDIER

■ DEVELOPER: RIOT ■ YEAR: 1992
■ SYSTEM: PC ENGINE CD

■ **The *Valis* series** tell the story of Yūko Asō – a schoolgirl who has sworn to protect Earth from demons. The "Valis" of the title refers to the sword Yūko uses in battle. The PC Engine CD *Valis* is an overhaul of the NEC PC-88 original and was the last *Valis* title released – it's also arguably the best. *Valis*'s scrolling action moves from hack-and-slash rumbles to projectile-based melees as you power-up Yūko's sword, and its challenges alternate between claustrophobic demon attacks and open platforming. A great series in need of revival.

Minority Report

KENSEIDEN

■ DEVELOPER: SEGA ■ YEAR: 1988 ■ SYSTEM: MASTER SYSTEM



■ [Master System] *Kenseiden*'s samurai undertakes his quest through a Japan populated by demons.

■ ***Kenseiden* suffers from the understandable but unsatisfactory practice of comparing lesser-known games to more popular ones that they only vaguely resemble.** This shorthand is fine if you qualify your comparison with details of how the two titles differ, but often this is forgotten in the rush to categorise an unknown gaming quantity. And so, *Kenseiden* is often described as the Master System's *Castlevania*, which is unfair, as *Kenseiden* plays differently and has a much darker tone.

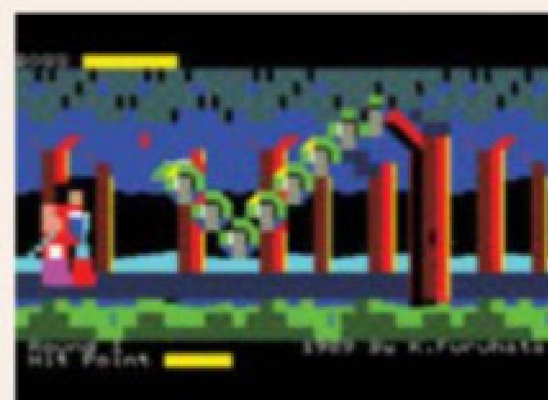
Where *Castlevania*'s Simon Belmont leaps and whips his way through a set largely inspired by Universal Studios' back catalogue, *Kenseiden*'s samurai Hayato undertakes his sedate quest through the washed-out provinces of a medieval Japan populated by a demon army. And while *Castlevania* offers an animated arcade romp where you rely on your instincts, *Kenseiden* adopts a more considered pace where careful timing is required rather than twitch reactions.

Crucially, *Kenseiden* also favours a power-up system quite different to *Castlevania*'s approach. *Kenseiden* instead rewards you with a scroll each time you defeat a warlock, which teaches Hayato a new move such as leaping great heights or launching a devastating sword attack.

What defines *Kenseiden* is its structure. Once you've defeated a province's warlock you can choose which province to tackle next, and within each province the route taken is down to you. Judged on its own merits *Kenseiden* can be seen for the tense and brooding title that it is.

» EUGEA

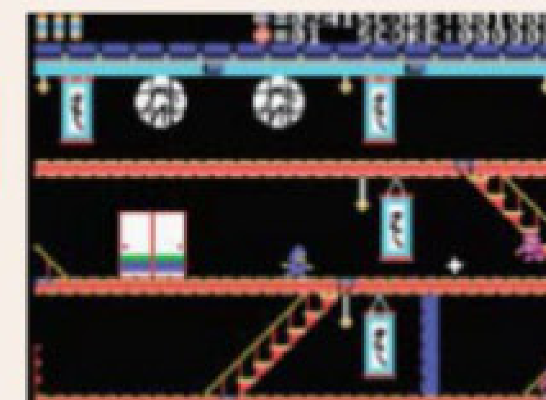
■ DEVELOPER: KAZUHIRO FURUHATA
■ YEAR: 1989 ■ SYSTEM: MZ-700



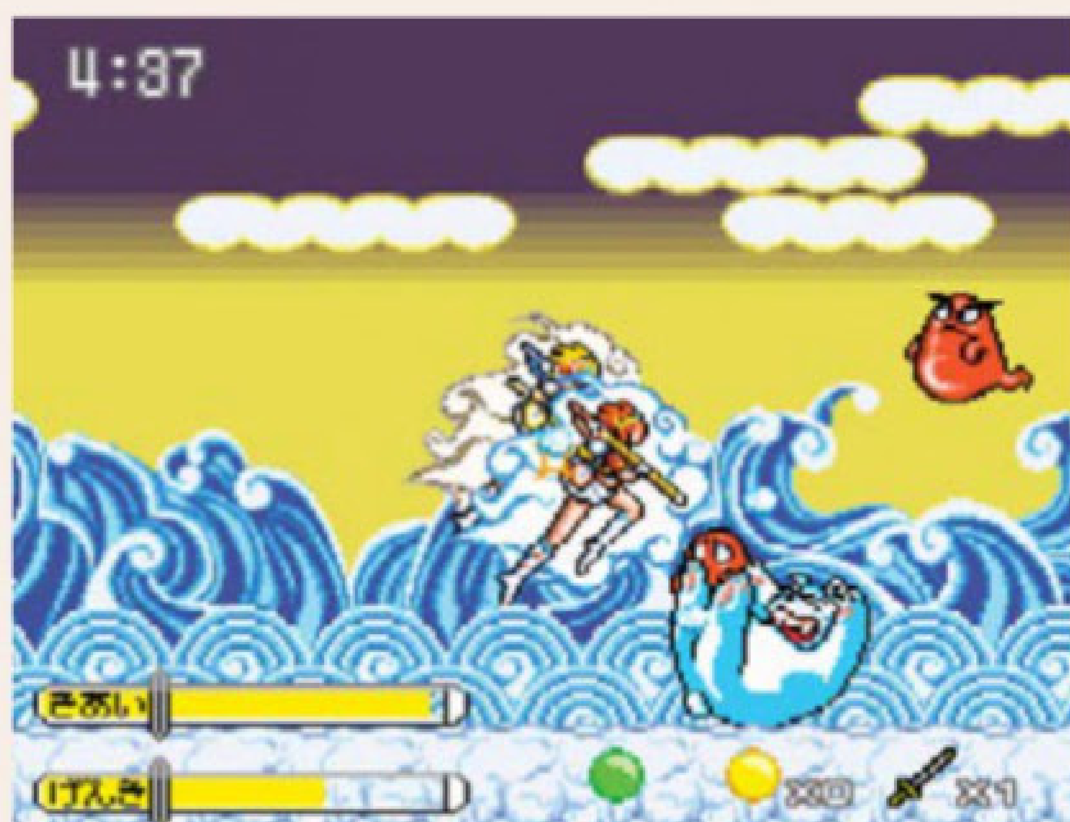
■ It's amazing that Kazuhiro Furuhata managed to coax slick animation and intense gameplay out of the MZ-700 given its meagre capabilities. But with his scrolling hack-and-slash *Eugea* he did just that.

» IGA NINPOUTEN 2

■ DEVELOPER: CASIO SOFTWARE ■ YEAR: 1986
■ SYSTEM: MSX



■ A simple premise sees you guiding a little ninja into a rival clan's stronghold taking out any opposition you meet along the way. The game offers a blend of platforming and shuriken-throwing.



» MAKERUNA! MAKENDOU

■ DEVELOPER: AFFECT CO LTD ■ YEAR: 1993
■ SYSTEM: SUPER FAMICOM

■ **The first in** a genre-shifting trilogy, *Makeruna! Makendou* is another example of a schoolgirl taking the lead in a Japanese game. Specifically, Mai Tsurugino, who must defeat monsters using her magically enhanced skills in the martial art Kendo. Unlike its sequels, *Makeruna! Makendou* is a scrolling beat-'em-up with platform elements, which takes its cue from Nineties anime with a focus on cute opponents and surreal boss-fights. But this presentation conceals challenging gameplay, so while *Makeruna! Makendou*'s detailed but ridiculous monsters are amusing their effect on your health bar isn't.



» KAIZOU CHOUJIN SHUBIBINMAN 3

■ DEVELOPER: MASAYA ■ YEAR: 1992
■ SYSTEM: PC ENGINE CD-ROIM

■ **This third entry** in Masaya's *Shubibinman* series is arguably the best looking, probably helped by the fact that it was the only chapter developed for CD. And although the fourth instalment is a good-looking Super Famicom title, part three's visuals are that bit more vibrant. *Shubibinman 3* sees the return of Tasuke and Kyapiko the android child heroes seen in the first two games. Like in the original, the game is a scrolling hack-and-slash that gives the player access to a beam weapon. Spectacular bosses and set pieces complement its demanding swordplay.



» KYATTO NINDEN TEYANDEE

■ DEVELOPER: TECMO ■ YEAR: 1991 ■ SYSTEM: FAMICOM

■ **Created during the** anthropomorphic fighter craze of the Nineties, *Kyatto Ninden Teyandee* is based on a Japanese animation. Since this was westernised – as *Samurai Pizza Cats* – it's surprising there's no NES version. This is a shame, because the title's visuals and animation work wonders with Nintendo's hardware. The game itself is a solid platformer that lets you play one of the cat fighters but also lets you control members of a 'Rescue Team' whose unique skills allow you to get through problem areas. The title's early levels are easy, but consider them a warm up for the tricky final stages.

EDGE

■ DEVELOPER: TGL INC ■ YEAR: 1993 ■ SYSTEM: PC-9801

■ **Although better known for its contributions to the *Farland* strategy series and the *Variable Geo* fighting franchise, Technical Group Laboratory – or TGL for short – also developed *Edge* – a little-known scrolling fighter for NEC's PC-9801.**

Edge takes its cue from various popular sci-fi manga titles of the Nineties and so has a more involved storyline than the typical scrolling beat-'em-up of the time. *Edge* opens with a cutscene that introduces a post-apocalyptic world controlled by a pair of warring mega-corporations, and as its narrative unfolds the player's character – a master of the martial arts – is recruited into a resistance group by their seductive female leader.

Essentially, though, the game's 22nd Century setting is just a backdrop for a futuristic take on the warriors of ancient Japan. And while further cutscenes advance the plot you don't need to understand the Japanese dialogue to realise the aim is to use your character's martial arts moves to take out street thugs and face-off against mecha bosses. This brings up *Edge*'s one failing; there's a gulf between the challenge presented by the game's grunts and that posed by the title's bosses, which results in steep end-of-level difficulty spikes.

Aside from its uneven gameplay, though, *Edge* gets everything else right. Its defined visuals look like they've jumped off a page of manga, and its rock score works perfectly with the fluid animation of its sprites. But what makes *Edge* so easy to recommend is that it has that quality that demands repeat play no matter how hard the game beats you.

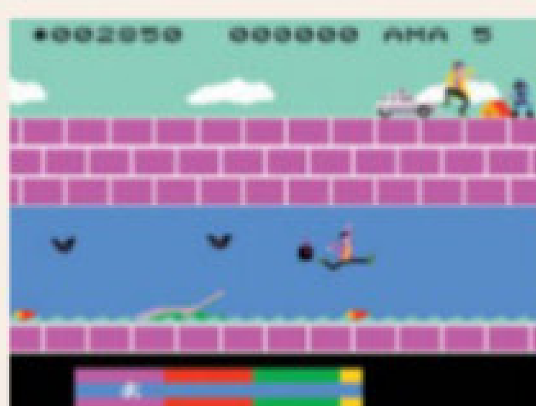


■ [PC-9801] *Edge*'s 22nd Century setting allows for a futuristic take on the warriors of ancient Japan.

» LUPIN III

■ DEVELOPER: EPOCH ■ YEAR: 1984
■ SYSTEM: SUPER CASSETTE VISION

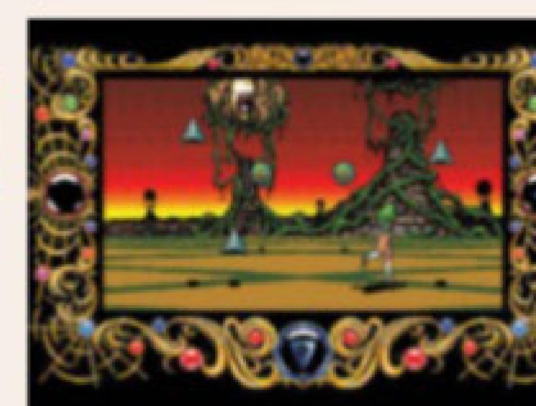
■ Admittedly, *Lupin III*'s main character is more gentleman thief than warrior, but in this colourful outing the player has to fight for his life against the many dangers found in the game's sewers.



» ALANTIA: LEGEND OF BLUE STAR

■ DEVELOPER: CROSS MEDIA SOFT ■ YEAR: 1988
■ SYSTEM: PC-9801

■ The beautiful though flawed *Alantia* riffs off *Space Harrier* and is a real achievement given its host hardware, but its firing mechanism makes the controls much harder to master than they should be.





» RETURN OF THE NINJA

■ DEVELOPER: NATSUMI ■ YEAR: 2001
■ SYSTEM: GAME BOY COLOR

■ **A spiritual successor** to its 1990 Famicom ninja title *Yami No Sigotonin Kage, Return Of The Ninja* was Natsumi's return to the scrolling hack-and-slash format. Natsumi chose bright colours for its title's sprites and a more subdued palette for its backgrounds, which really helps characters stand out from the scenery. In terms of plot, your ninja is on a revenge mission against a rival clan. His sword is your most effective weapon, although less-powerful shuriken prove handy. In order to master the game's branching levels, however, you need to collect tools to walk on ceilings and water, dig underground and glide short distances.



» SUPER NINJA-KUN

■ DEVELOPER: JALECO ■ YEAR: 1994
■ SYSTEM: SUPER FAMICOM

■ **The *Ninja-Kun* games** have a complicated lineage so it's simplest just to say that the earliest titles were UPL's Eighties coin-ops *Ninja-Kun: Majō No Bōken* and *Ninja-Kun: Ashura No Shō. Super Ninja-Kun* is essentially a 16-bit reworking of those titles with concessions made to difficulty. Ninja-kun is a diminutive warrior who dresses in red and favours the shuriken. *Super Ninja-Kun* is a polished scrolling platformer where Ninja-kun takes on an army of cute but deadly foes, but unlike the earlier games he can take a bit of damage and win new weapons. *Super Ninja-Kun* does, however, provide as much chaotic fun as the originals.



» KAMEN NO NINJA AKAKAGE

■ DEVELOPER: SHOUEI SYSTEM ■ YEAR: 1988
■ SYSTEM: FAMICOM

■ **Akakage – a ninja** – was first seen in a late-Sixties TV series, but this Famicom adaptation was likely based on a late-Eighties anime inspired by Akakage's original incarnation. *Kamen No Ninja Akakage* is a side-scrolling fighter that allows you to power-up various weapons *Gradius*-style. The challenge is to pick the right weapon to best the particular troop of foot-soldiers or boss you're fighting – sometimes up-close swordplay works well, other times long-range attacks are more effective. Highly recommended.



LYNX AWAKENING

AN ATARI LYNX RETROSPECTIVE

Back in 1989 Nintendo set the world alight when it unleashed the Game Boy. Mere months later Atari went one better with the release of the colour 16-bit Atari Lynx. Kieren Hawken remembers what made the system so special

Criminally, there's not a lot of love for Atari's first handheld, with many seeing it as nothing more than a failure that simply couldn't compete with Nintendo's Game Boy.

While Nintendo's console did indeed soundly trounce Atari's system (and every handheld that chased after it) the Lynx remains an essential slice of gaming history, and one that shouldn't be ignored.

The Handy – as the Lynx was once known – was first conceived around August 1986 by Dave Needle and RJ Mical, who, at the time, worked for software house Epyx. They were better known as being two of the guys behind the hugely popular Amiga computer, so designing hardware was nothing new for them. The story goes that they drew up the initial designs on a napkin over lunch. Lots of ideas and revisions were thrown about over the next few years including use of a monochrome screen, tape loading, infrared link-up and different processors. It was intended to be quite the beast…

Chuck Sommerville, the creator of *Chip's Challenge* and *Zarlor Mercenary*, was a member of the Handy team at Epyx and has amusing memories of the development process. "The prototypes were built on 4x4 sheets of plywood," he recalls. "They were covered with chips that simulated what the final hardware would do. There was sometimes a line of engineers waiting to try their work on the 'real' hardware. There was one guy who seemed to hog it a lot. We had a little sharp pointy thing we used to joke was an accelerator to get him to move on. After the bankruptcy (of Epyx) the prototype was dismantled and nobody wanted the plywood so I took it home and repaired the floor in my bathroom with it!"

The eventual design of the system that became the Lynx featured a 16-bit graphics chip, nicknamed 'Suzy', which could generate 4,096 different colours (the same as the Amiga) on a full colour display. And it was also able to scale and rotate both sprites and backgrounds, something that could only be found on the state of the art arcade machines of the time. The CPU was a 65C02, a variation of the popular chip found in systems such as the Commodore 64, Atari 8-bit, NES and Apple II. But in the Lynx it had been clocked around four times as ▶



"The prototype was dismantled and nobody wanted the plywood so I took it home and repaired the floor in my bathroom with it!"

Chuck Sommerville



There are plenty of superb games for Atari's machine. It excels in arcade conversions.

fast as those machines so it could keep up with the custom processors alongside it. The 'brain' was aided by a 16-bit blitter chip, a custom chip capable of complex maths to take some of the heavy load off the CPU. A blitter chip had previously been seen in the Amiga but this was the first time a console had featured such technology. The set was finished off by 'Mikey', the Lynx's custom sound chip. The four channels of stereo sound were pretty standard for the time, but the ability to play digitised/sampled sound on all of those channels without stressing out the CPU was not! The Lynx's hardware design was so far ahead of the competition you would think that Epyx had the next big thing on its hands right? Of course, history tells us that that wasn't the case…

Not having the finances to launch it itself, Epyx touted its new Handy console to all the big companies, starting with Nintendo, its eventual competitor and Sega. But after several polite answers of "no" it was left with just one company – Atari. Jack Tramiel's company was still a big name in the gaming industry but the folks at Epyx were well aware of what Atari's illustrious leader was like to work with, so the publisher really was a last resort. Chuck remembers the day he was told that Atari had purchased the system very well. "At first I was really concerned, because my boss was upset about it. Apparently he had bad history with the Atari management." To be fair Atari did try its best to smooth over these relations, as it was really impressed with the Handy and knew it had a winner on its hands. "Later we heard about how Atari was trying really hard to make things right for us," continues Chuck. "I was very hopeful that things would turn out well, because Epyx had basically run out of development money, and we had few options left."

After Atari agreed to buy the Handy from Epyx it went through a couple of name changes, as the coder of *Gates Of Zendocon* Peter Engelbrite remembers. "For a brief time Atari had named it the Atari Portable Entertainment System. When I pointed out that the acronym would be APES they dropped it." He also remembers an alternative name to Handy, though: "There was a time when the project was still top secret, even within Epyx. There were security locks on the doors to the Lynx development area and the Nuclear Toaster was actually the official name for the project!" Eventually Atari settled on the name Lynx, a nod to its ability to link up with multiple machines, rather than a reference to the big cat of the same name. It was actually nothing more than a coincidence that Atari's next two consoles were also named after felines, with the Panther being named after the Panther Kallista sports car and Jaguar following exactly the same theme.

The Atari Lynx was officially launched in the United States on 1 September 1989; just two months after the Game Boy had hit those same shores. While it offered a full colour screen along with the impressive

> "For a brief time Atari had named it the Atari Portable Entertainment System. When I pointed out that the acronym would be APES they dropped it" Peter Engelbrite

LYNX I VERSUS LYNX II

How do Atari's two handhelds stack up?

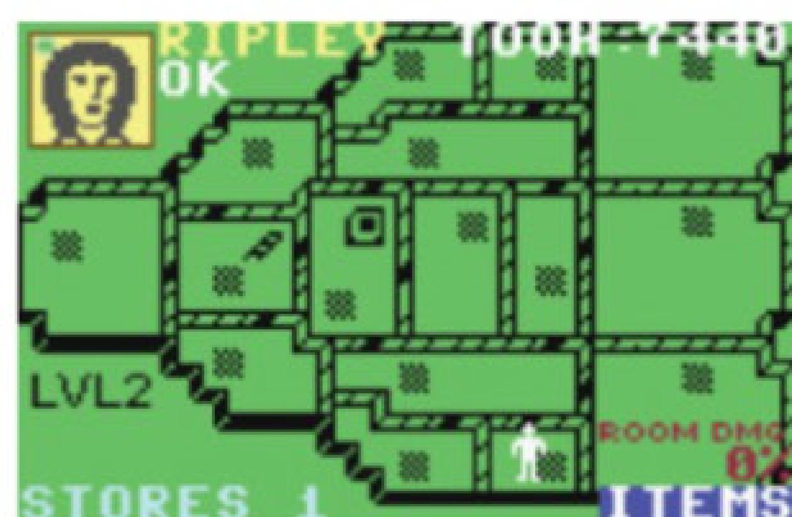
Lynx I		Lynx II
270 x 98 x 38	DIMENSIONS	230 x 98 x 48
4-channel mono	SOUND	4-channel stereo
4-5 hours	BATTERY LIFE	5-6 hours
No	REGION LOCK	No
160 x 102	RESOLUTION	160 x 102
3.5" LCD Backlit	SCREEN	3.5" LCD Optional Backlit
50mm	SPEAKER	40mm
Up to 16	COMLYNX	Up to 16

x2 Photos courtesy of Evan-Amos

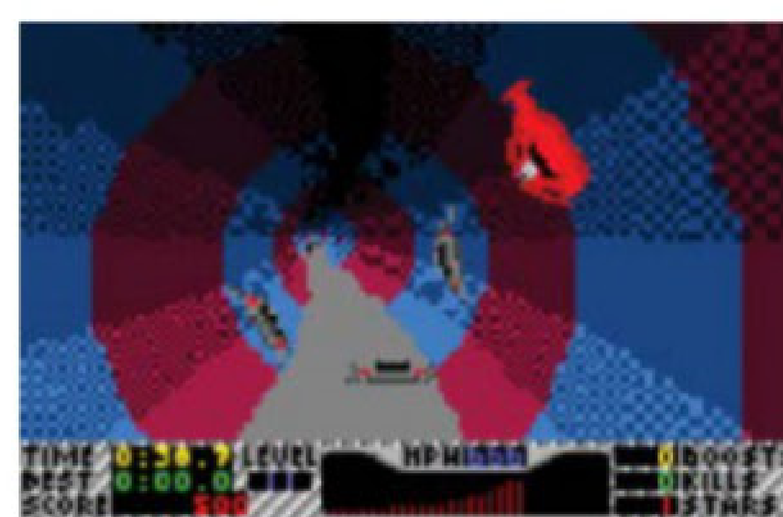
custom chips it was twice the size, twice the price and had considerably worse battery life. But despite this the initial reaction to the machine was a very good one with it being widely praised by the media and gamers alike. The system was packaged with the brilliant *California Games* and just three games were available on launch; the technically impressive *After Burner* clone *Blue Lightning*, shoot-'em-up *Gates Of Zendocon* and *Electrocop*. More games started to appear through 1990 and Atari's console quickly caught the eye of those looking for a more powerful machine.

The Lynx launched in 1990 in Europe with an eye-watering price of £179.99 in the UK – nearly double the price of Nintendo's console. Atari UK Marketing Manager Daryl Still was given the task of promoting the Lynx on this side of the pond and clearly remembers the first time he got his hands on one. "I seriously loved it then and still do. The step up technically from the Game Boy was huge." Daryl wasn't the only person impressed by the Lynx though, so were the people that Atari hired to be part of its new in-house development team. D Scott Williamson was one such person. Initially hired by Atari to work on games for the Atari Genesis when the deal with Sega fell thorough he wrote a game for the Atari STe, before getting to grips with the Lynx. He certainly has fond memories of the console. "I've been programming since I was ten years old, [using] assembly language since I was 14 and was a lifelong Atari zealot," he explains. "Getting a programming job with Atari in 1987 was a dream job. Everything about the Lynx was so amazing, I leaped at the opportunity to work on it and dug in deep".

D Scott Williamson is behind some of the Lynx best arcade conversions, having coded *Roadblasters*, *Toki* and *STUN Runner*. He was only too happy to explain what it was like to code for. "Architecturally it was way ahead of its time – portable, colour, networkable, left and right-handed, and those are just the design differentiators visible from the outside," he begins. "It had fast multiply and divide hardware; impressive multi-channel feedback circuitry for creating sounds; large copy protected cartridges and, probably most impressive to me, were the innovations in graphics. True bit-mapped graphics with hardware collision detection; the ability to draw compressed sprites with skew and scale, which can be combined to do rotations and lots of other graphical tricks. It was possible to render triangles and real 3D models on the platform for games like *Hard Drivin'* and *Steel Talons*. The scalable compositable sprites allowed me to make the winding roads in *Road Blasters* and tunnels in *STUN Runner*. As if the hardware wasn't enough, it was the first game system I used that had complete documentation and a full SDK, including sample code for each function of each subsystem. On top of that there were tools, not just compilers and specs to create graphics, sound effects, instruments and music. Full mature systems. The development environment was on the Amiga the first windowed game development environment I had used – which meant for the first time I could edit code, compile it, and debug it, all without exiting one application to load another as was the case in DOS previously. ▶



[Lynx] Chris Millward's first Commodore 64 to Lynx conversion was the brilliant *Alien*.


[Lynx] D Scott Williamson's *STUN Runner* has to rank as one of the finest conversions of the popular coin-op.


An in-depth look at the Atari Lynx's innovative backlight.

Photos courtesy of Evan-Amos

SONGBIRD PRODUCTIONS

Carl Forhan's company publishes both new homebrew games and unreleased prototypes



What led you to setting up Songbird and publishing new Lynx games?
When I found the Lynx in the mid-Nineties, the internet was young and Usenet was the place to hang out. I found some posts from Atari hackers on one of newsgroups saying they had found a way to download code to Lynx RAM via the serial port. I just thought that was too cool to pass up on, so I got in touch with them. I think the first demo I made was a laughably trivial game called *Pong5*, which you can still find floating on the interwebs.

After that, I really dug into the Lynx hardware and learned how to create sounds, utilise stereo, and of course the sprite engine.

What do you think made the Lynx so special?
The hardware engine that moves, scales and animates objects on-screen is simply amazing. It allowed very well done 3D-style games, in addition to ably handling all kinds of 2D goodness. And the multiplayer capabilities were way ahead of their time. Finally, they had some really well done arcade ports, everything from *Xenophobe* to *Ms Pac-Man*.

How do you feel about the way Atari handled the Lynx?
I think Atari was stuck in a difficult place, while the screen, graphics and audio were vastly superior to the Nintendo Game Boy, Nintendo got the big name licences like *Tetris* and their own *Mario* and *Zelda*.

Do you have any plans to release more Lynx games in the future?
While I would like to release more games, it's getting much harder to find the hundreds of hours needed to program. I have one Java game complete with graphics which I'd like to port to the Lynx, and several ideas for sequels to other games I've already published.


» Not many people know that the Atari Lynx was released in Japan.

> "I seriously loved it then and still do. The step up technically from the Game Boy was huge"
> Darryl Still

PROTOTYPE POWER

The cancelled games that had a new lease of life

ROAD RIOT 4WD


A conversion of the technically impressive Atari arcade game of the same name. The coin-op used a custom cabinet with jolting seats, fully digitised graphics and scaling galore. The Lynx version does an incredibly good job of replicating everything on the small screen. It's only missing an ending and some fine-tuning to the controls.

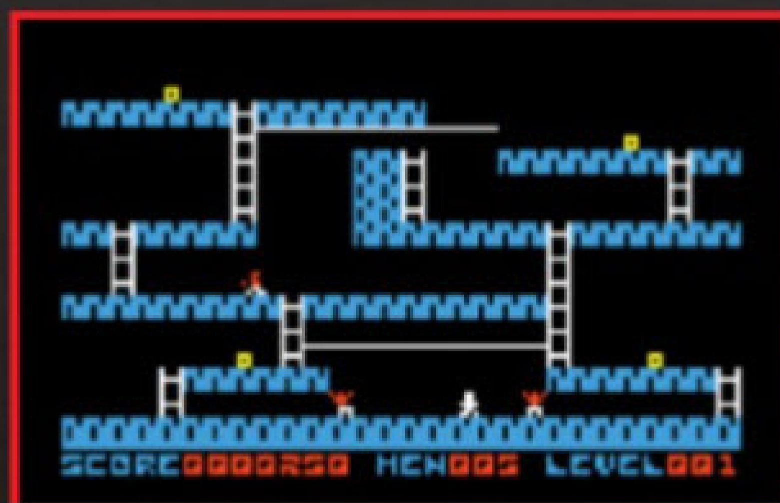
ALIEN VS PREDATOR


AVP was the Jaguar's killer app and the first game in the popular franchise but many people are unaware that it was being ported to the Lynx. It was about 50 per cent complete when development was stopped on all Lynx projects to concentrate on the failing Jag. It's a crying shame it was never completed because the prototype shows real promise.

MARLBORO GO!


This game is a really strange one for a couple of reasons. Firstly because it is sponsored by a tobacco company and secondly because the game, along with a customised bright red Marlboro Lynx, was given away to a small selection of company employees. The actual game is a rather fun side-scrolling bike racer.

LODE RUNNER


The Lynx version of *Lode Runner* was originally going to be published by Telegames but was never completed and forgotten about until a prototype version leaked a few years ago. The Lynx game is a port of the Atari 8-bit version and retains a very similar look and feel. The only thing missing from it is the sound.

EYE OF THE BEHOLDER

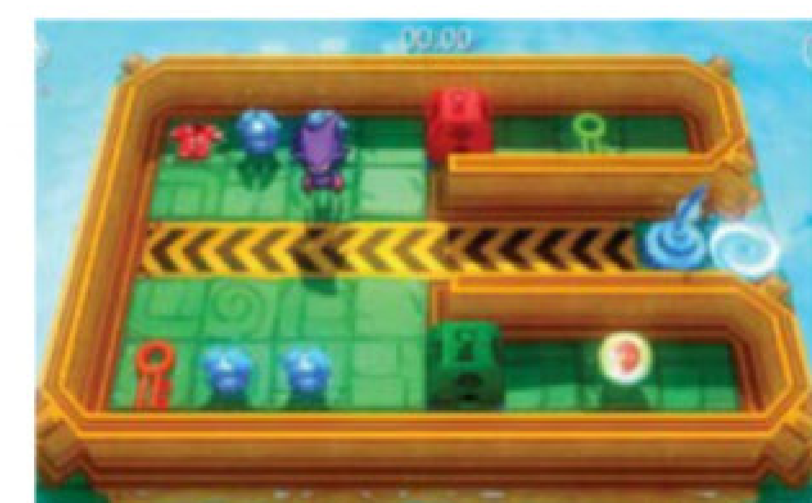

There was a lot of excitement around when it was announced that this *Advanced Dungeons & Dragons* game was coming to the Lynx. Despite being complete it was never released due to the high cost of the ROM and battery backup needed. The game has since had a proper release thanks to collector Eric DeLee.

The development hardware was impressive too – the Howard board (named after it's creator) was darn near a logic analyser, allowing us to peek into the running hardware in real time, set source and data breakpoints, and do source level debugging. There was nothing like it from Atari, Nintendo, or Sega before that time. Dave Needle, RJ Mical, Steve Landrum and the rest of the engineers at Epyx really put together an amazing forward looking package that in many ways was a stepping stone to the 3DO hardware that came later."

Through 1991 the Lynx began to gain real momentum and this proved to be the most important year for the handheld. Firstly a series of price cuts that put it on level terms with the Game Boy and the newly released Sega Game Gear saw sales rise dramatically. Secondly the new games arriving like *Ninja Gaiden*, *Road Blasters*, *Klax* and *Pac-Land* started to raise the profile of the Lynx and it began to gain a reputation for its great arcade ports. But the biggest thing to happen to the Lynx this year was the complete re-design of the unit that evolved into what we now know as the Lynx II. This new unit was just over an inch shorter, had moulded hand grips, a backlight switch (to save on power when paused), screen protector and the card slot was moved to the back as well as many other cosmetic changes; it's gargantuan compared to today's systems, but fitted in more with the handhelds of the time. Perhaps the most important features of the new Lynx were the reduced costs of producing it and the improved battery life that added around two hours play-time thanks to this refined technology (although it was still laughable when compared to the Game Boy).

Atari also stepped up the marketing and saw a huge increase in sales with the Lynx ending the year as one of the best selling consoles in the UK. Atari was still running on a fairly modest budget compared to its rivals so had to pick its campaigns wisely. A tie-in with Warner Bros saw a Lynx game released based on *Batman Returns*, which was set to be the biggest film of the year. The game was completed in time to release alongside the movie and a 15 minute long advert for the Lynx (and the game) was shown before the film in movie theatres. Daryl Still recalls how this deal turned him into an overnight VIP. "I remember going to the movie premiere in Leicester Square and hobnobbing with the likes of Bob Geldof and Paula Yates and Catherine Zeta Jones and John Leslie on the red carpet. The big issue with the advert was that it was

» [Lynx] *California Games* was the original pack-in game for the Lynx, the surfing is still an all-time **RG** favourite!



» [PC] *Chip's Challenge* has recently been updated in 3D for play on Steam and mobile as *Chuck's Challenge*.



» Two sets of buttons caters for both left and right-handed gamers, with the Flip button flipping the screen.


» The Comlynx allowed for up to 16 machines to be linked together.

all gameplay and when it appeared on the big screen the pixelation was somewhat extreme!"

The Lynx continued this momentum into 1992 with a steady flow of games that kept up with the high quality ports the Lynx was known for. Widespread success had eluded Atari though with a lack of third-party support and the Game Boy juggernaut taking over. Come 1993 the writing was on the wall for the innovative handheld. Atari started to drop support to concentrate on the soon-to-be-released Atari Jaguar and cancelled many previously announced games. The Lynx was left to fade away slowly as Atari had its one last shot at the market with the Jaguar before the infamous reverse merger with JTS. The Lynx eventually went on to achieve lifetime sales of nearly 3 million. An impressive figure, until you realise the Game Gear achieved 11 and the Game Boy over 118 (although that also includes the later Game Boy Color). "Sales were less than they should have been, that's for sure," explains Daryl. "The worldwide build was well into seven digits and they had all been sold into retail." But this was not the end of the Lynx; its fans were never going to let it die!

Third-party Lynx developer Telegames continued to support the machine after its commercial demise releasing a number of titles that were coded at Atari but never released such as *Raiden*, *Hyperdrome* and *Fat Bobby*. Come the early 21st Century and the homebrew scene for the Lynx started to kick off when the BLL (Behind Lynx Lines) development kit for the PC was developed. This saw people like Carl Forhan (of Songbird), Matthias Domin and Bastian Schick starting to play around with the machine. The first big homebrew games to be released for the console were Bastian's *Tetris* clone *T-Tris* and Carl's version of the classic *Pong* known as *Ponx*. As ▶

HARDWARE HIGHLIGHTS

The many reasons that make the Lynx a must own console

■ The Lynx was the first home system to support hardware scaling. This advanced feature had previously only ever been seen in advanced arcade games like *After Burner* and *Pit Fighter*.

■ Mikey, the Lynx's sound chip, was the first in any console to provide specialist sampled sound support on all four channels. This is why so many Lynx games feature incredibly crisp and clear speech.

■ The colour LCD screen was a first for a handheld and the 16-bit graphics chip, called Suzy, gave programmers an incredible 4,096 colours to choose from with a maximum of 16 per scanline.

■ There are a number of differences between the two versions of the Lynx including different screens and speakers, placement of the battery compartment and card slot and overall size of the machine.

■ Other advanced features of the Lynx included hardware scrolling, hardware support for over a thousand sprites, 64K of memory and game cards that could go up to a maximum of two megabytes.

■ Another first for the Lynx was its use of a 16-bit math co-processor to work alongside the 8-bit CPU. This took a lot of the load of the central processor and allowed the Lynx to provide super fast gameplay.

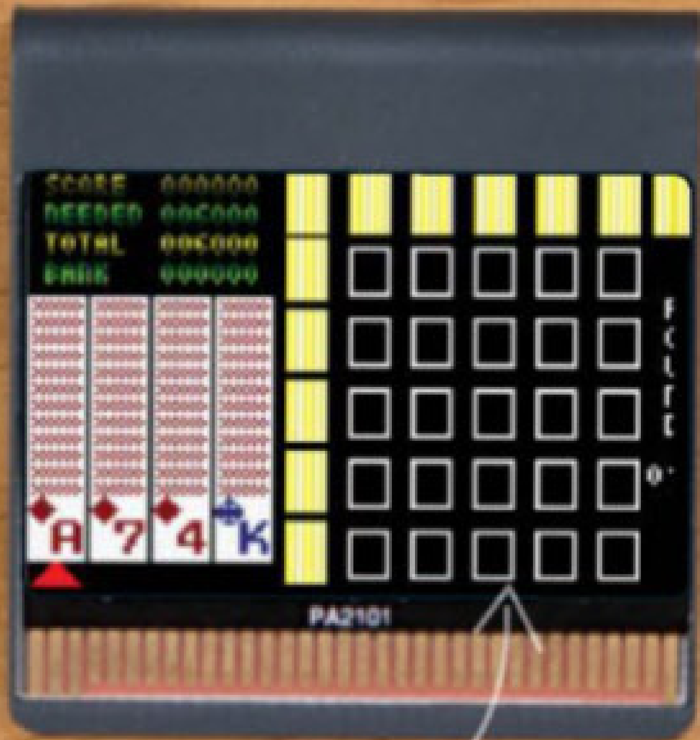
■ The biggest fault of the Lynx was of course the battery life, with an average of five hours on the original Lynx and six hours on the Lynx II it fell far short of the rival Game Boy. But this was more than the four hours of the Game Gear.

HOTTEST HOMEBREWS

There's a wealth of homebrew games available, these are some of the best

ALPINE GAMES
DURANIK

■ Not just a great homebrew game, Duranik's *Alpine Games* is one of the best games on the Lynx full stop. There are nine different events to compete in and some of the most stunning graphics you will see on a vintage handheld.



REMNANT SONGBIRD PRODUCTIONS

■ Many people were left disappointed when Jeff Minter's *Ultra Star Raiders* was never released for the Lynx. But thankfully the gap was filled by Carl Forhan's *Remnant* – subtitled *Planar Wars 3D* – an impressive first-person space shooter.



POKERMANIA MW SOFTWARE

■ An incredibly addictive puzzle game from German programmer Markus Wuehl, *PokerMania* involves dropping playing cards into a 5x5 grid to form vertical, horizontal or diagonal lines using the traditional poker hands from a simple pair to a full house.

YASTUNA 1 & 2 RGC

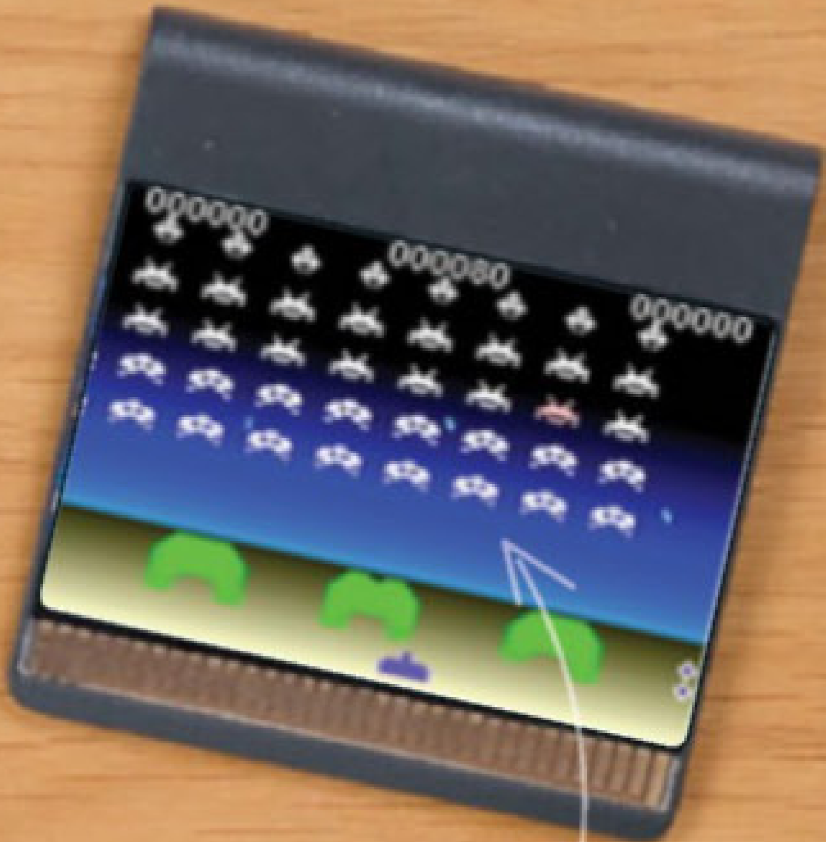
■ It would be unfair here to mention one without the other, as both volumes of *Yastuna*, by French coder Fadest, are equally impressive. Both cartridges contain of mini-games with a mix of different genres and some particularly outstanding graphics.





CHAMPIONSHIP RALLY
SONGBIRD PRODUCTIONS

■ *Championship Rally* was the second homebrew game released for the Lynx by Songbird (after *Ponx*) and is an excellent top-down racing game. There are seven stages with a championship, time trials, single races and the all important versus mode too.



ZAKU SUPER FIGHTER TEAM

■ This game was released to much fanfare back in 2009 and is basically a Lynx interpretation of the PC Engine classic *Air Zonk*. Special credit must go to the publisher for the traditional Lynx-style box and curved lip game card.



SIMIS MD GAMES

■ A compilation of games and demos by Matthias Domin and Bastian Schick, the initials of the title stand for the contents. Included are *Snakebyte*, *Invaders*, *Mines*, *Isolation* and *Specials* (a collection of demos). A great collection of classic games.







well as homebrew the newly-formed company Songbird Productions also joined in on the act publishing unreleased prototypes. From here the homebrew scene exploded and Lynx owners benefited greatly. Alex Thissen programmed *Tiny Lynx Adventure*, which received a favourable review in this very publication, and he is currently working on a conversion of the indie PC game *Hack, Slash, Loot*. But for the Lynx anniversary he has a very special announcement up his sleeve. "I recently discovered an unreleased game on the development kit I got from former Lynx developer Robert Maidorn," he begins. "He created the game in 1993 just before Atari stopped releasing new games and I intend to release it to celebrate the 25th anniversary of the Lynx."



» Several games including *Klax* and *Gauntlet III* allow you to hold the Lynx vertically.

Chris Millward is another homebrew coder to look out for, he recently converted the C64 version of *Alien* to the Lynx and is also working on his own *Cabal* clone called *Lynx Ops*. He is planning to release something special for the anniversary of Atari's great handheld. "I am currently doing a rewrite of *Jack Attack*, again from the C64, but this time in tribute to the late Jack Tramiel," he tells us. "I've got a dozen other games on the list too including some new IP which might be sold and some more free rewrites of C64 classics." Harry Dodgson is an old hand at homebrew having developed games for the Atari 7800 such as *Combat 1990* before turning to the Lynx. We were keen to know what got him interested in coding for the console. "I was interested in the Lynx when it was first released," he tells us. "I had a few contacts at Atari from my 7800 homebrews and I paid the fee to get the Lynx programming book. But I couldn't justify the price to get a development kit and there wasn't a way to test out programs at that time without one. When the Jaguar came out I thought about developing for that, but I realised my strength was 6502 code, not 68000. By that time, the cost for a Lynx development kit and a couple EPROM boards had dropped considerably."

> "Everything about the Lynx was so new and amazing, I leaped at the opportunity to work on it and dug in deep" D Scott Williamson

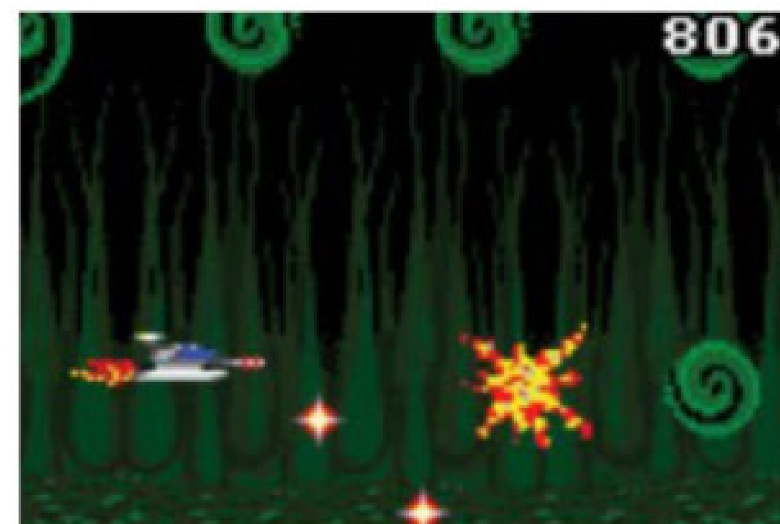
The Lynx homebrew scene continues to thrive through passionate developers like Chris, Harry and Alex. From the big commercial-quality projects like *Zaku*, *Alpine Games* and *Championship Rally* to the many tools, demos and fun mini-games developed. These have been made even more accessible by the release of the Lynx Flash Card in 2007. Designed by Bernd Thomas it has a USB socket for easy connection to a PC and makes both playing and developing homebrew games for the Lynx much easier. There is also the Handy emulator, available in multiple forms, that allows you to play and test homebrew ROMs. Although, it's worth noting that the emulation is not perfect, especially when it comes to sound, and it does have some speed issues but represents another good way to discover the world of the Lynx.

So this leaves the final question of why the Lynx should be remembered, and why is it generating so much attention, some 25 years after its original release. Daryl Still offers up this forward thinking reply. "Well, it could be argued that without the Lynx showing what could be done with colour on handheld technology you'd not have the iPhone or iPad," he reasons. "Buy me three or four pints at some point and I'd have that argument with you, in any case!" It may seem extreme, but there's certainly an argument to be had that the Atari Lynx filled the hi-tech area of the handheld console market that would eventually go on to become occupied by the PSP and PS Vita.

D Scott Williamson thinks the secret to the console's success is its software. "I think every game platform should be remembered for its games," he rightly tells us. "All the hardware, tools, examples, and sounds don't really matter if they don't entertain people and by that standard I think the Lynx was an exceptional platform. For me personally there was more to the Lynx, I think the Lynx stands out in videogame history for being one of the most forward thinking, ahead of its time game technology platforms. More advanced platforms came later, but I can't think of a single one that contained as many leaps and innovations in so many areas and in a way that was so well done. Working on it really was like working on videogames for the future at that time." ★



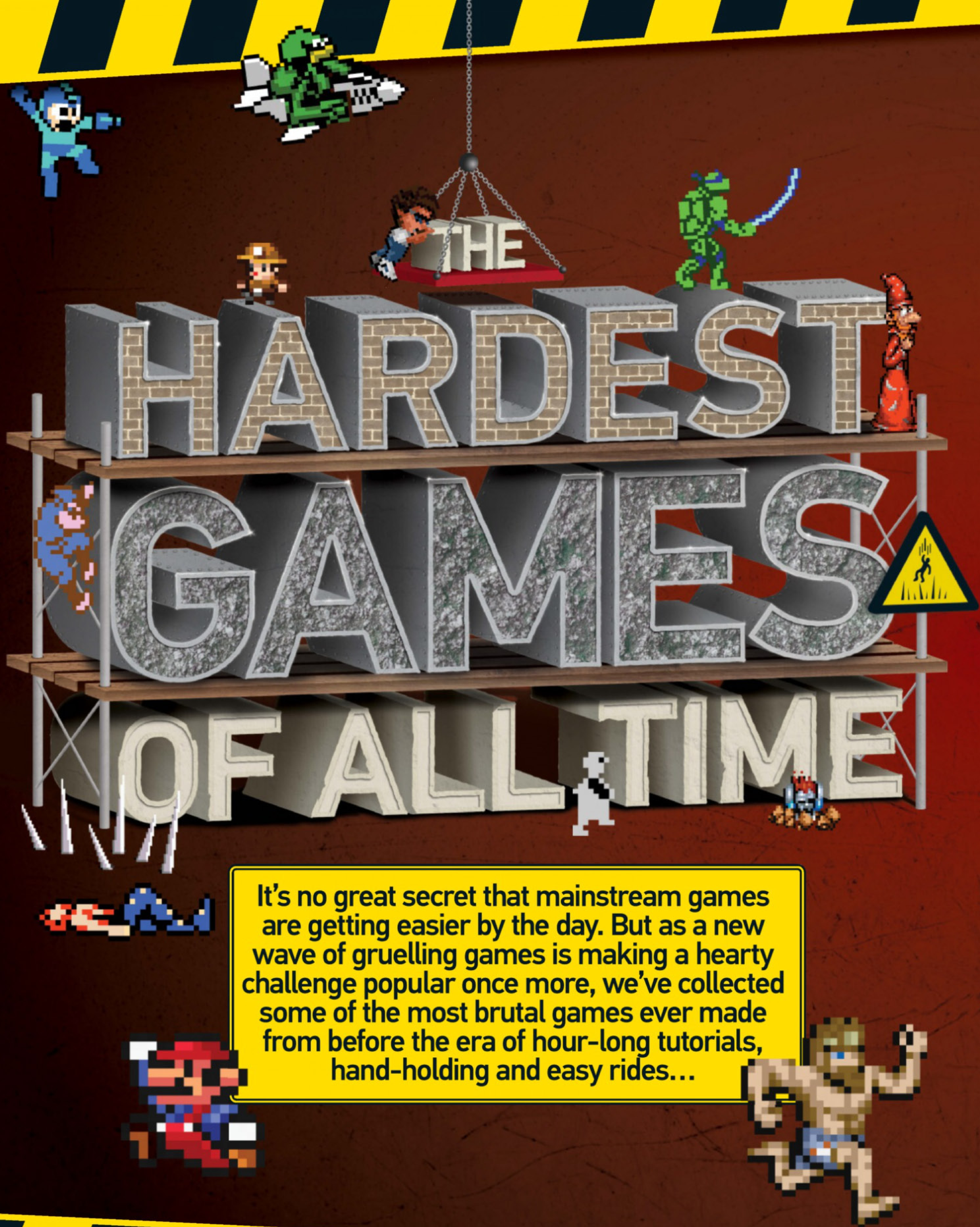
» Six batteries power Atari's console. They sadly won't last too long either.



» [Lynx] *Gates Of Zendocon* by Epyx's Peter Engelbrite was one of the launch games for the Lynx.



Special thanks to: Carl Forhan, Darryl Still, Peter Engelbrite, D Scott Williamson, Chuck Sommerville, Alex Thissen, Harry Dodgson and Chris Millward.



THE HARDEST GAMES OF ALL TIME

It's no great secret that mainstream games are getting easier by the day. But as a new wave of gruelling games is making a hearty challenge popular once more, we've collected some of the most brutal games ever made from before the era of hour-long tutorials, hand-holding and easy rides…

CONTRA

FORMAT: VARIOUS **YEAR:** 1982 **DIFFICULTY:** 8

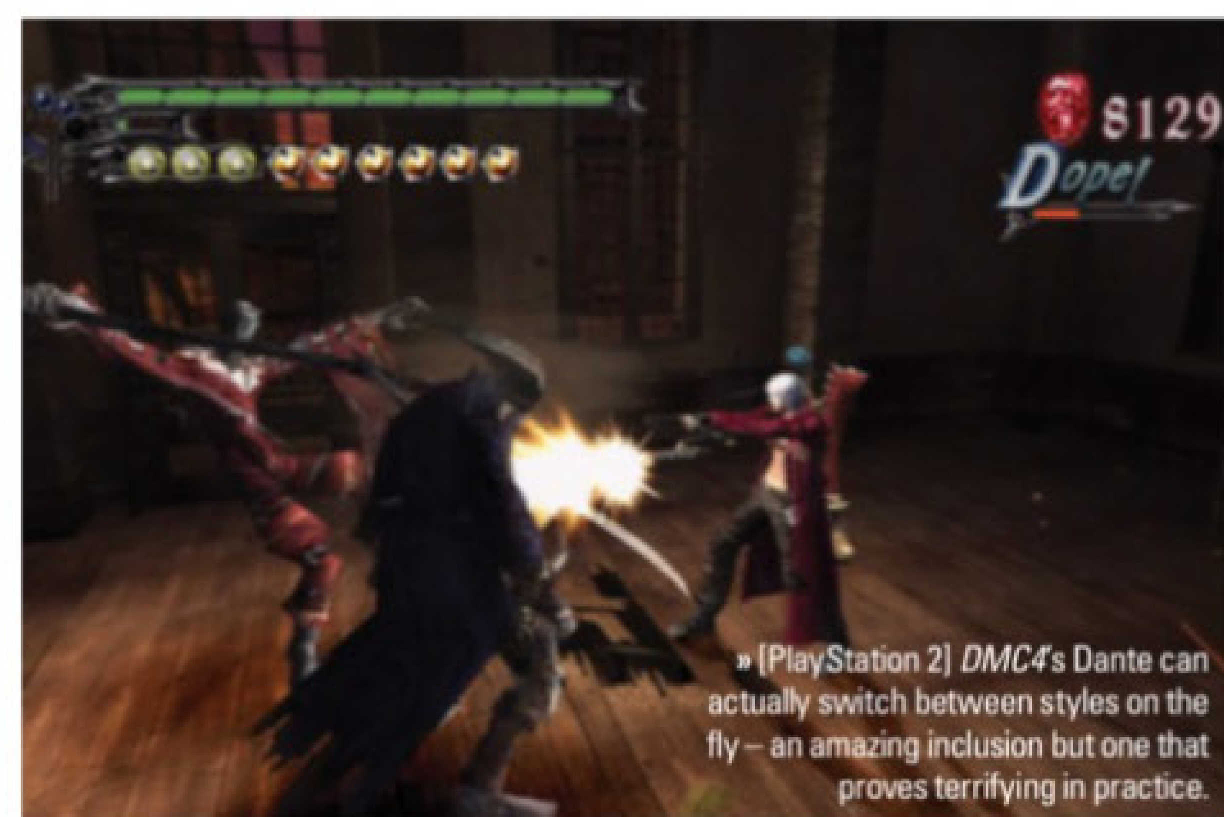
For many, this is where the love affair with all things hardcore first began. Whether you played *Contra*, *Gryzor* or *Probotector*, you got the same punishing experience – a side-scrolling shooter that really makes you work for every inch of screen you managed to reveal. Contact with basically anything that isn't the ground is deadly in this grim war-torn world, but precise control and an array of weapons allow Bill 'Mad Dog' Rizer and Lance 'Scorpion' Bean (yes, really) to blast their way through all the same. Things can get even tougher when the perspective changes during base raids, pulling the camera behind you for an into-the-screen shooter diversion where it's not always easy to judge where bullets actually are.

As tough as the game may be, Konami actually made the NES version harder still with additional hazards. Drafting in a friend to help you isn't actually the safest of ideas – if one of you starts to lag behind, the other will find themselves surprised by off-screen threats and coordinating a good two-player run is surprisingly tricky with so much going on. Even with the help of the Konami Code for 30 lives rather than the basic three, few who call themselves gamers today have seen the credits to *Contra*. Later games have retained much of the original's hardcore purity, but it's this one that many will remember through a haze of smashed, chewed and dented controllers.



» [NES] The NES port was surprisingly faithful to the coin-op, retaining levels, weapons and – most importantly – difficulty.





» [PlayStation 2] *DMC4*'s Dante can actually switch between styles on the fly – an amazing inclusion but one that proves terrifying in practice.

DEVIL MAY CRY 3: DANTE'S AWAKENING

FORMAT: PLAYSTATION 2 **YEAR:** 2005 **DIFFICULTY:** 10

We've often seen games have their difficulty levels altered when crossing from East to West or vice versa, but this is one of the most extreme cases. *Devil May Cry* is no walk in the park, yet Capcom decided that the default difficulty of the Western version should be the equivalent of Japan's Hard mode. If you never managed to get past Cerberus, now you know why – you were actually on Hard the whole time. Capcom addressed this for the Special Edition release but even so, *Devil May Cry 3* on the harder difficulties is something only the best will ever beat.

INTO OBLIVION

FORMAT: AMSTRAD CPC **YEAR:** 1986 **DIFFICULTY:** 9

This somewhat obscure Amstrad space exploration game by Stephen Curtis is a mapper's worst nightmare – the game consists of some 2,500 screens across 42 planets, making it almost impossible to complete without first spending hours on sketching out the layout. To make matters even worse, reaching the end of this sprawling maze without collecting enough Psyche along the way would still lead to failure, making this one of the most gruelling games we've ever played. Today, even just a basic black-and-white image file of the game's map takes up more memory than the game itself does…



» [Amstrad CPC] It's visually basic, but what would you expect from a game so enormous?

FAMOUS DEATHS

Even the best will have seen these happen…

Resident Evil 4



Battletoads



Sonic The Hedgehog



Prince Of Persia



Manic Miner



Tomb Raider



SUPER MARIO BROS: THE LOST LEVELS

FORMAT: FAMICOM DISK SYSTEM
YEAR: 1986 **DIFFICULTY:** 8

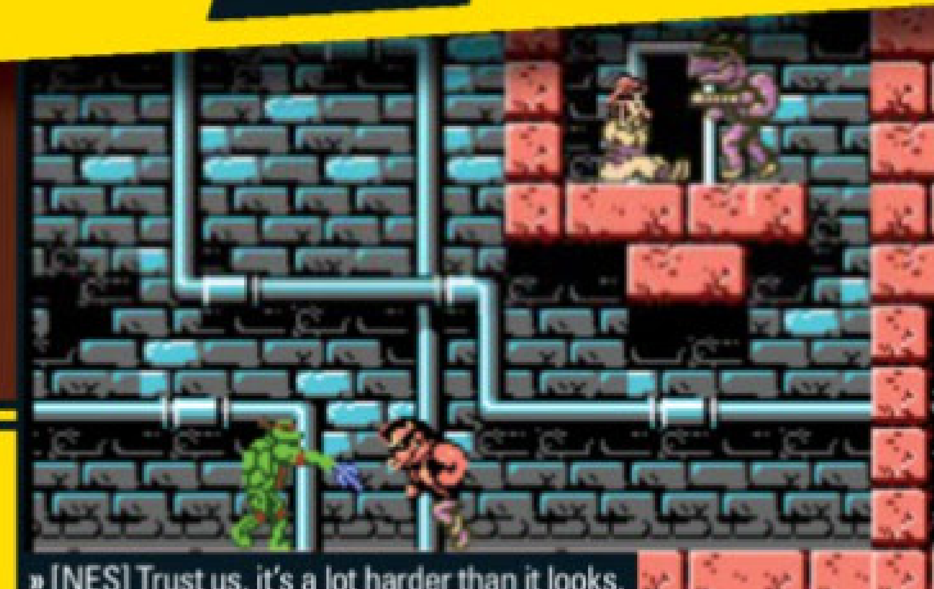
It's widely renowned as one of the most accessible franchises in all of gaming, but *Mario* games haven't always offered players an easy ride. Later stages in most *Mario* titles tend to be pretty challenging to be fair, but this Japan-only sequel to the NES original sticks the boot in from the moment you hit Start. This comparatively obscene level of difficulty led to Nintendo deciding not to release the game outside of Japan, instead reskinning Fuji Television tie-in *Doki Doki Panic* to be *Super Mario Bros 2* in the West.

We're not surprised in the least that Nintendo was scared to put this out following the huge success of *Super Mario Bros* – the company had finally found its feet in the games industry, so following the most popular game with one that only experts could really enjoy would hardly have been the most sensible move. It's not just level design that makes this sequel harder, either. Sure, wider gaps and trickier platforming are part of it, but that's before you factor in the devious tricks that also came into play. Toxic mushrooms, more aggressive enemies, warp pipes that would actually send you *back* in the game rather than skipping stages… it's just plain rude.



» [Famicom Disk System] If you ever complained that *Super Mario Bros* was too easy, this is your punishment.





» [NES] Trust us, it's a lot harder than it looks.

TEENAGE MUTANT NINJA TURTLES

FORMAT: VARIOUS **YEAR:** 1989 **DIFFICULTY:** 10

Difficult games come in all shapes and sizes, but who would have thought that a cartoon tie-in could prove to be one of the most crushing of them all? Released the same year as the superior scrolling fighter, this half-shelled headache instead takes cues from the equally tough *Zelda II* (the Great Palace can do one, seriously) to combine top-down overworld exploration and side-scrolling levels.

Problem is, the hostile pixel blocks that attack you make getting through each area a nightmare, as do instant death hazards such as the electric cables in the river level or the weird car things that patrol the overworld. It just throws stuff at you until you can't take any more and collapse in a heap, sobbing uncontrollably. The PC version managed to make things even worse – redrawn graphics meant it looked better, sure, but a measurement error of *Spinal Tap* proportions meant that there was one particular jump that physically could not be cleared without cheating.

NINJA GAIDEN BLACK

FORMAT: XBOX **YEAR:** 2005
DIFFICULTY: 9

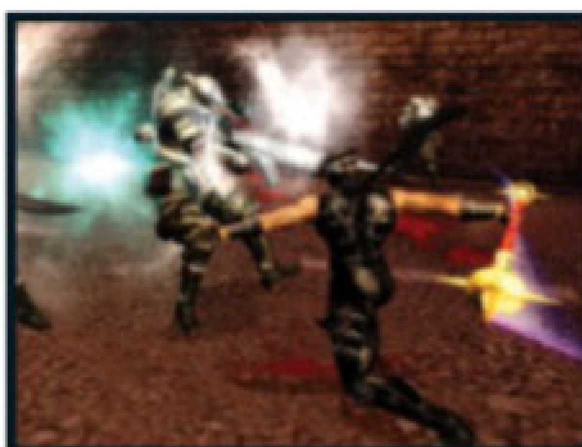
Debates rage on to this day as to whether Capcom's *Devil May Cry* series or Team Ninja's modern *Ninja Gaiden* games sit at the head of the hardcore character action table. We'd mix that up a little by asking where *Bayonetta* factored into this fictional seating plan but when it comes to pure difficulty, it really does come down to this two-horse race. The simple answer is that despite so many similarities, the two games are surprisingly different – *DMC* is all about using super-tech cancels and dealing as much damage as possible, *Ninja Gaiden* is a much more defensive game, forcing dodges and parries rather than encouraging 500-hit combos.

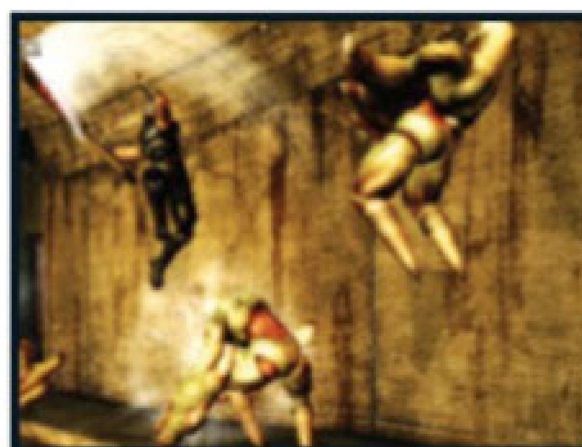
Black remixed the Xbox-exclusive action game to include an easier difficulty in response to players who had moaned about the game's difficulty, but it wasn't quite that simple. Ninja Dog difficulty would basically mock players who chose it over the course of the game, while all of the other settings were tweaked to be more challenging and a whole new level, Master Ninja, added for those who thought they were Ryu Hayabusa reborn. We never even managed to beat the first boss on Master Ninja. Yeah, it's pretty rough.

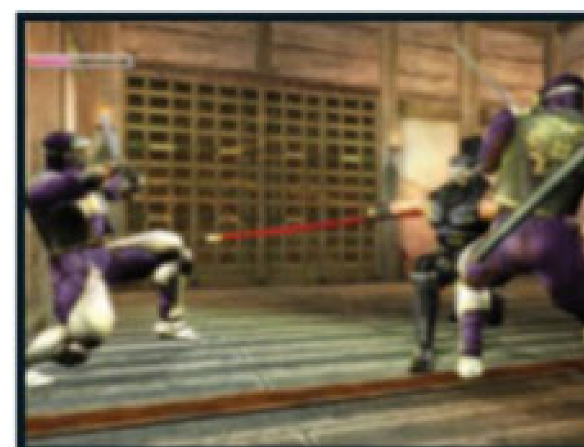
As much as *Black* is the height of the franchise's harsh-but-fair challenge, it'd be plain wrong to omit the original *Ninja Gaiden* games from any discussion of difficult games. They fall more on the unfair side of things but still hold up well for anyone seeking out a challenge.



» [Xbox] While *Black* introduced the simpler Ninja Dog difficulty, it also scaled up the rest of the skill levels accordingly.







DEFENDER

FORMAT: VARIOUS **YEAR:** 1980 **DIFFICULTY:** 9

Few arcade games during the Eighties were as intimidating as William Electronics' *Defender*. Created in 1980 by Eugene Jarvis and Larry DeMar, it silently challenged you with its scary button setup.

Many arcade games of the time could be fairly simple affairs, typically comprising of a joystick and one or two buttons. Not *Defender* though. Jarvis's game featured five large buttons that just dared you to tackle them. One controlled your fire, another the smart bomb, while the third and fourth controlled your thrust and reverse. Finally, the Hyperspace button was your last ditch attempt to avoid an ugly death (although this in itself might spawn you in a more dangerous situation). Thrust and Reverse could have simply been applied to the joystick, but that would have been far too easy. *Defender* wanted your quarters and you were going to have to master ever single aspect of it if you wanted to survive for more than a few minutes.

Mastering the controls was only half the story as the gameplay itself was just as difficult. Your ship zooms across a wrapped lunar backdrop in search of missing survivors that need to be protected from incoming invaders. The invaders themselves are unnervingly accurate with their shots and will also attempt to carry off your precious survivors. Let this happen and the invader turns into a far more dangerous mutant, with play continuing until all your survivors are dead (and the planet is destroyed, causing a huge ramp in difficulty) or you run out of lives. A handy radar appears at the top of the screen, but this in itself initially appears to be mocking you, taunting you by revealing the locations of jeopardised survivors, while showing you just how many invaders still stand in your way. You can shoot invaders to make them drop their precious cargo, but you're just as likely to kill the person you're trying to save.

Defender may be insanely difficult, but it has that rare element that constantly pulls you back. While it's tough, it's never unfair, and you always blame yourself for every pointless death. It remains one of the finest shooters around and while several sequels followed, none of them really lived up to the original magic that *Defender* offered.





SMAC

■ *Defender*, especially once you'd lost the planet. Watched someone play on for quite a few levels after that in an arcade, once. True zen. Ten times harder if playing on a cab with direction buttons instead of a joystick.

> "The invaders themselves are unnervingly accurate with their shots"

INTERVIEW

Eugene Jarvis on the difficulty of Defender



Did you intentionally go out of your way to make *Defender* really hard?

The reason you get into game development is to make the ultimate game, the game you really want to play, that blows away all the limitations you see in the games out there. I was no different – *Defender* was designed to be the ultimate game for me, I was the audience! So of course the game was too hard.

How much play-testing went into *Defender*? Do you feel that the game is well balanced?

I had been practicing for six months, and players had to deal with all this shit, a joystick and five buttons, play *Space Invaders* with your left hand, *Asteroids* with your right and deal with crazy mutant aliens, all with zero warning. The fact that it actually worked was kind of a miracle. According to the stats the average player lasted 37 seconds. For three lives. Total.

What's the key to making people return to a hard game?

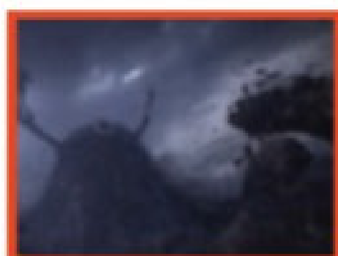
There has to be some kind of obsessive-compulsive drive to keep you running through the gauntlet. There has to be an ultimate payoff, or at least the illusion thereof. Part of it can be an amazing audio visual experience, a tour de force of pixelated pyrotechnics and devastating sounds which makes the *Defender* ride a riot. But graphics and sounds alone are not enough. You need to tap into basic human instincts of survival, kill or be killed, bring out the inner neanderthal to rise to the challenge. Are you going to be beaten by a stupid machine?

Is balance important?

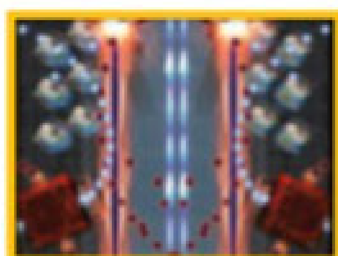
I think a huge key to the longevity of an impossible game is the right difficulty ramp. You need to ramp up to a place that is just a shade less than impossible, with just the barest probability of survival. Lots of play-testing is key to finding this zone, although it always boils down to a kind of feel or instinct of the last guy to touch the code. And then you fluctuate the difficulty in a wave-like fashion of challenge and relief, with lots of random events to keep it interesting.

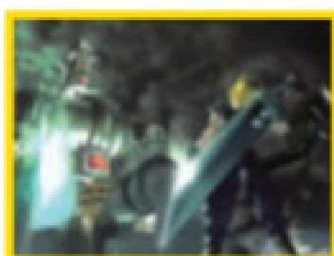
DIFFICUTLY SPIKE

Every game has its ups and downs









DARK SOULS

■ While moment-by-moment gameplay is generally pretty tough, bosses really raise the bar – mistakes are mercilessly punished. One particular boss battle, Ornstein & Smough, is cited among the hardest of all time, and with good reason.

BATTLETOADS

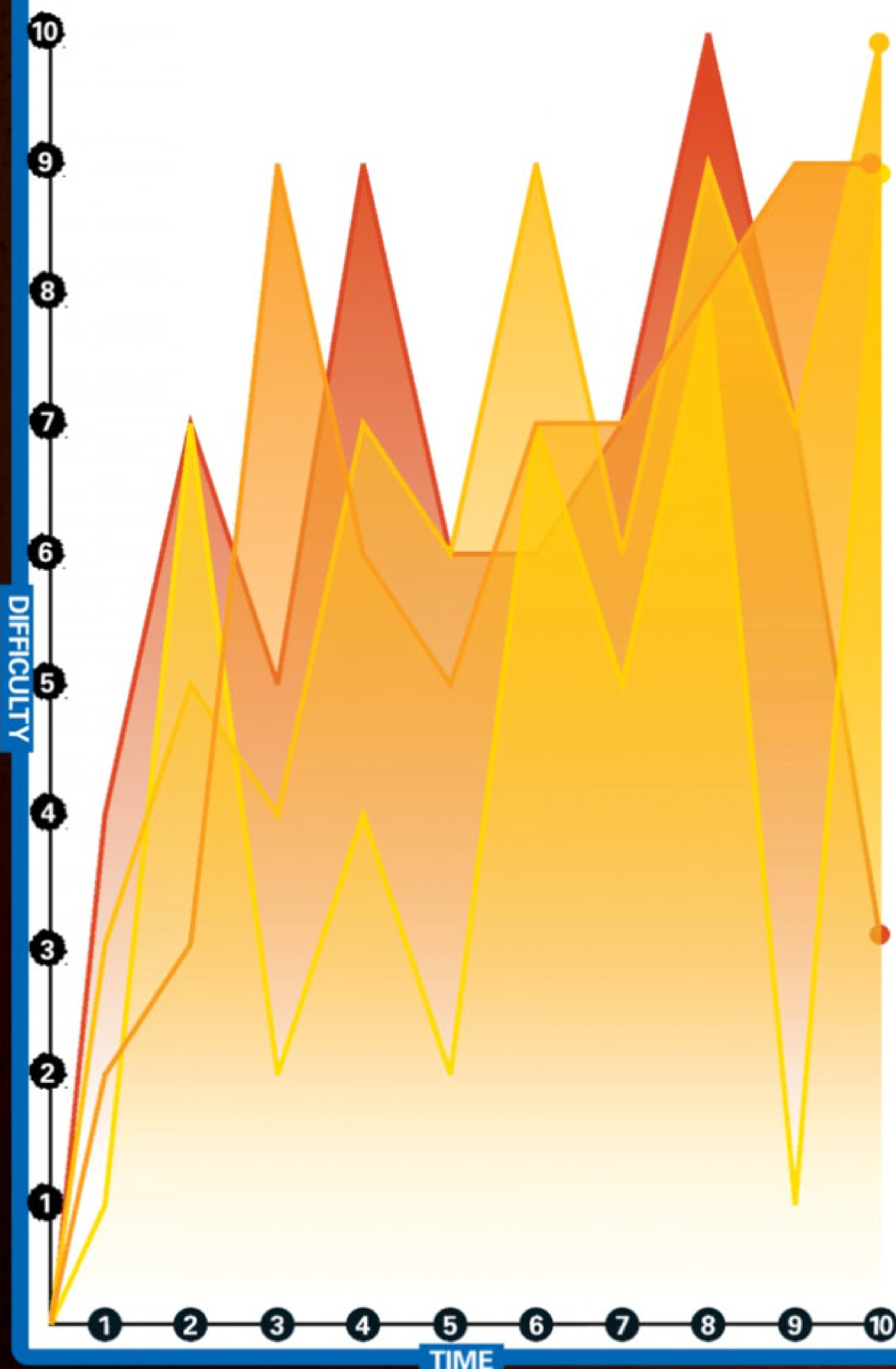
■ Scrolling fighters don't tend to be easy, but this one is infamous for being borderline unfair. Make it past Turbo Tunnel and things get easier, but not for long – there's not so much a difficulty curve here as a difficulty mountain range – it's all over the place.

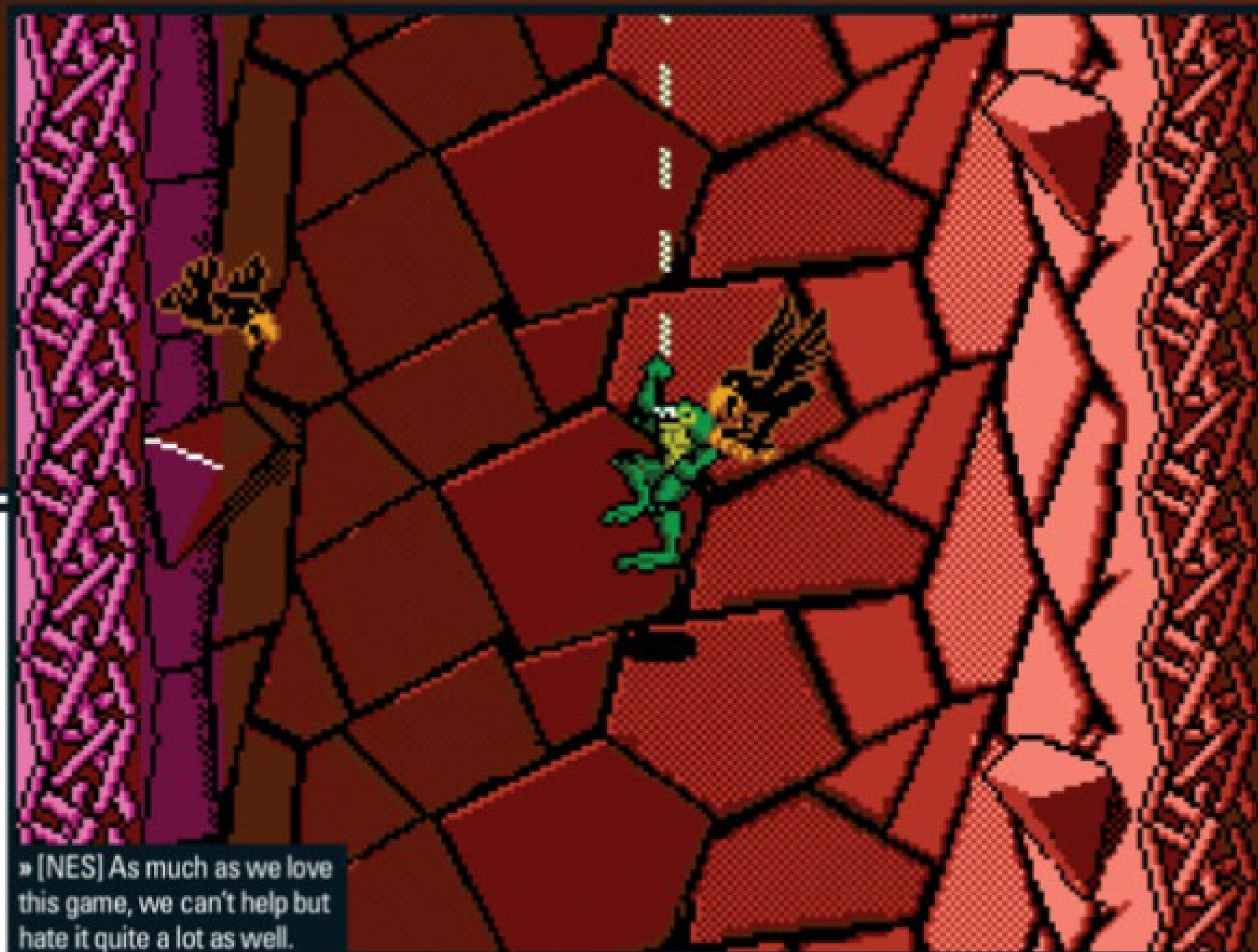
IKARUGA

■ Treasure games are often tough, but *Ikaruga*'s unique colour-switching mechanic makes it an entirely new discipline to master. Just surviving the later levels is tough enough, so watch out when you come to play properly in search of a decent high score.

FINAL FANTASY VII

■ Between mistranslations, optional bosses, chocobo racing and missable items, this one is all over the place. And while few would ever argue that *Final Fantasy* games are difficult, few would deny that this one had moments of frustration.





» [NES] As much as we love this game, we can't help but hate it quite a lot as well.

BATTLETOADS

FORMAT: NES **YEAR:** 1991 **DIFFICULTY:** 10

Difficulty curves are one of the toughest things to get right in games, but few games have got the gradual increase in challenge quite so wrong as *Battletoads*. If we were to ask everyone who had ever played the game how far they got, we imagine the majority would think about it for a moment, tell us it was the third level then punch whatever was closest to them. Repeatedly.

Turbo Tunnel will go down in history as one of the most unfair stages in any game ever, a speedy side-scrolling race level where even a single collision proves fatal, and after the curve soars into the stratosphere with this horrible level, it doesn't even bother coming back down – the rest of the game's 13 levels are horrible as well, albeit at least in different ways. So vicious was this infamous level that later ports of the game actually saw it tweaked or even removed entirely – collisions are non-fatal in the Game Gear version, for instance, while the Amiga version overlooks the level entirely, replacing it with a far simpler alternative.

It wasn't even just Turbo Tunnel that proved problematic, though. Enemies could lock you into hit-stun combos before belting you into instant death drops, while platforming – never exactly the game's strong point – gets stupid as you edge closer to a credits sequence that you'll never actually see.

SUPER MEAT BOY

FORMAT: PC, XBOX 360 **YEAR:** 2010 **DIFFICULTY:** 9

There's been something of a renaissance for sadistic platformers in recent years, with many indie developers taking cues from the great games from yesteryear to create levels so devious that you'll swear they're actually impossible. But while so many troublesome vintage games tend to be hard through poor design – be it fallout from the quarter-hungry arcade developer generation, technical limitations of certain platforms or whatever – this new breed is tight, fair and dangerously sadistic.

Like fellow Flash game *N*, *Meat Boy* started life in browsers before the guys behind it saw fit to take things up a notch. A more stylish twist on the maddening but oh-so-addictive high-speed hijinks of *N+*, *Super Meat Boy* is one of the great platformers of the modern age. As with so many games of its ilk, a quick glance at a level and a couple of early failures will often be enough to send you running off with your tail between your legs, while expert players manage to make the same stage look like the easiest thing of all time. It's pure skill all the way, from jump height to navigation to seeking out dangerous and quicker ways to reach the goal.

That's not even your only target here, either. Many levels feature collectible bandages or hidden warp zones (which lead to brilliant retro-themed bonus stages) but reaching these is often made incredibly difficult – bandages in particular are a nightmare as you still need to reach the goal after grabbing them for them to be added to your collection. On top of all that, dominating a level will unlock a much harder Dark World variant, usually littered with more spikes and saw blades than safe areas.

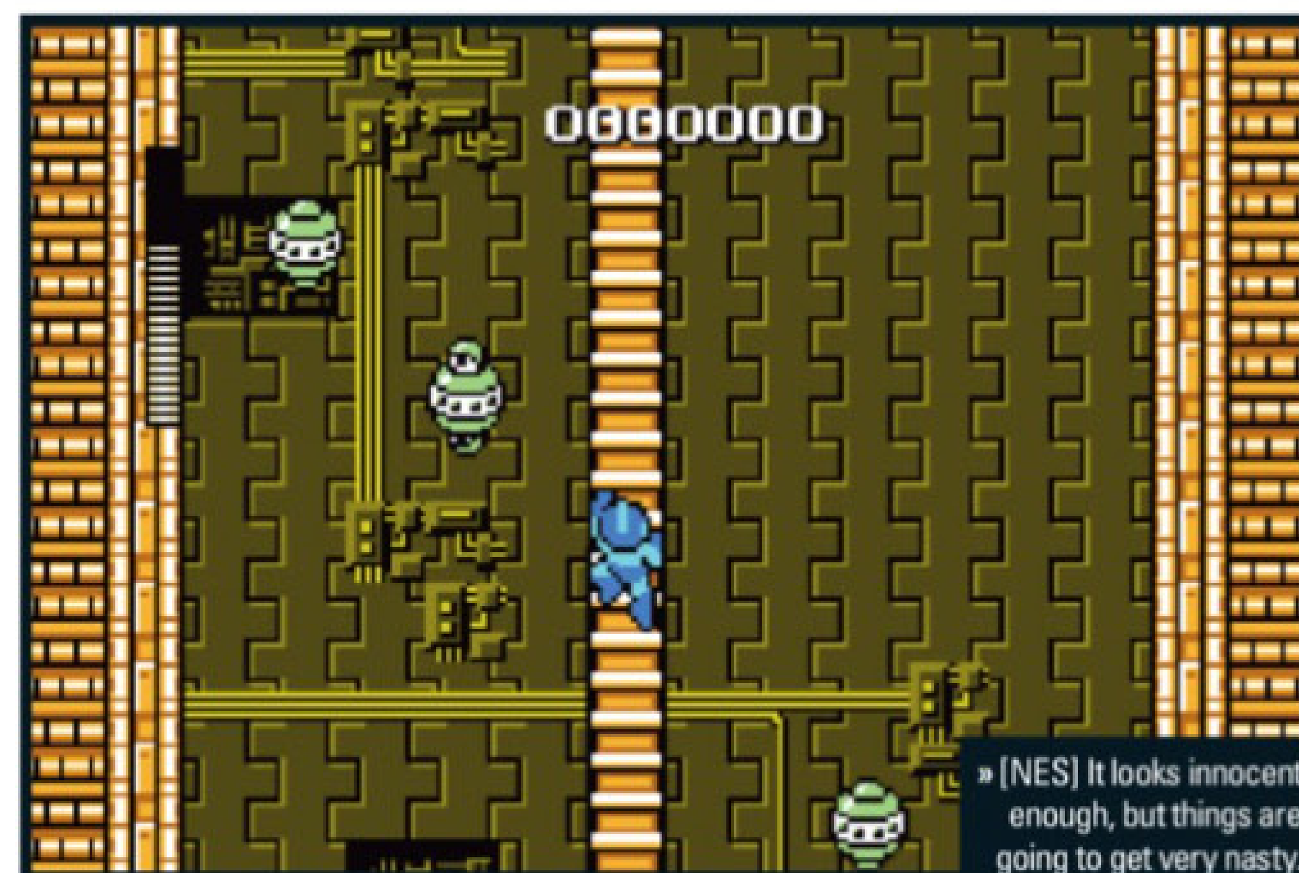




MEGA MAN

FORMAT: NES **YEAR:** 1987 **DIFFICULTY:** 8

Capcom's *Mega Man* is another title that had NES owners howling with frustration. While it boasted smart level design, it also featured insanely tough bosses, evilly placed hazards and spectacularly tough jumps. It was hard enough simply getting through a stage in one piece, but once you reached its end you faced an even tougher challenge. While the bosses of *Mega Man* are varied and full of character they are also extremely punishing, having brutal attack patterns that need to be learned. Even then you'll have a hard time of it, with *Mega Man*'s inability to duck turning him into an easy target. Defeating an enemy earns his weapon and here the game gets a little easier (only just, mind) as attacking bosses in certain combinations (you can choose which level you start on) gives you a slight advantage. It remains challenging and things didn't get any easier for its numerous sequels.


» [NES] It looks innocent enough, but things are going to get very nasty.

F-ZERO GX

FORMAT: GAMECUBE **YEAR:** 2003 **DIFFICULTY:** 10

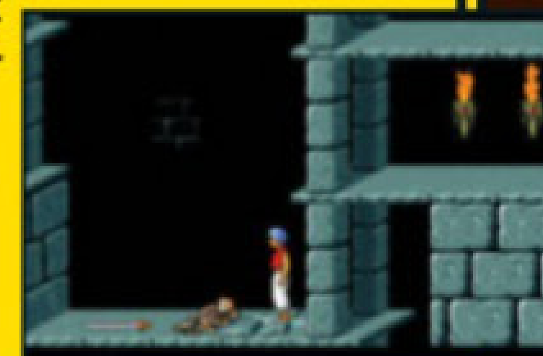


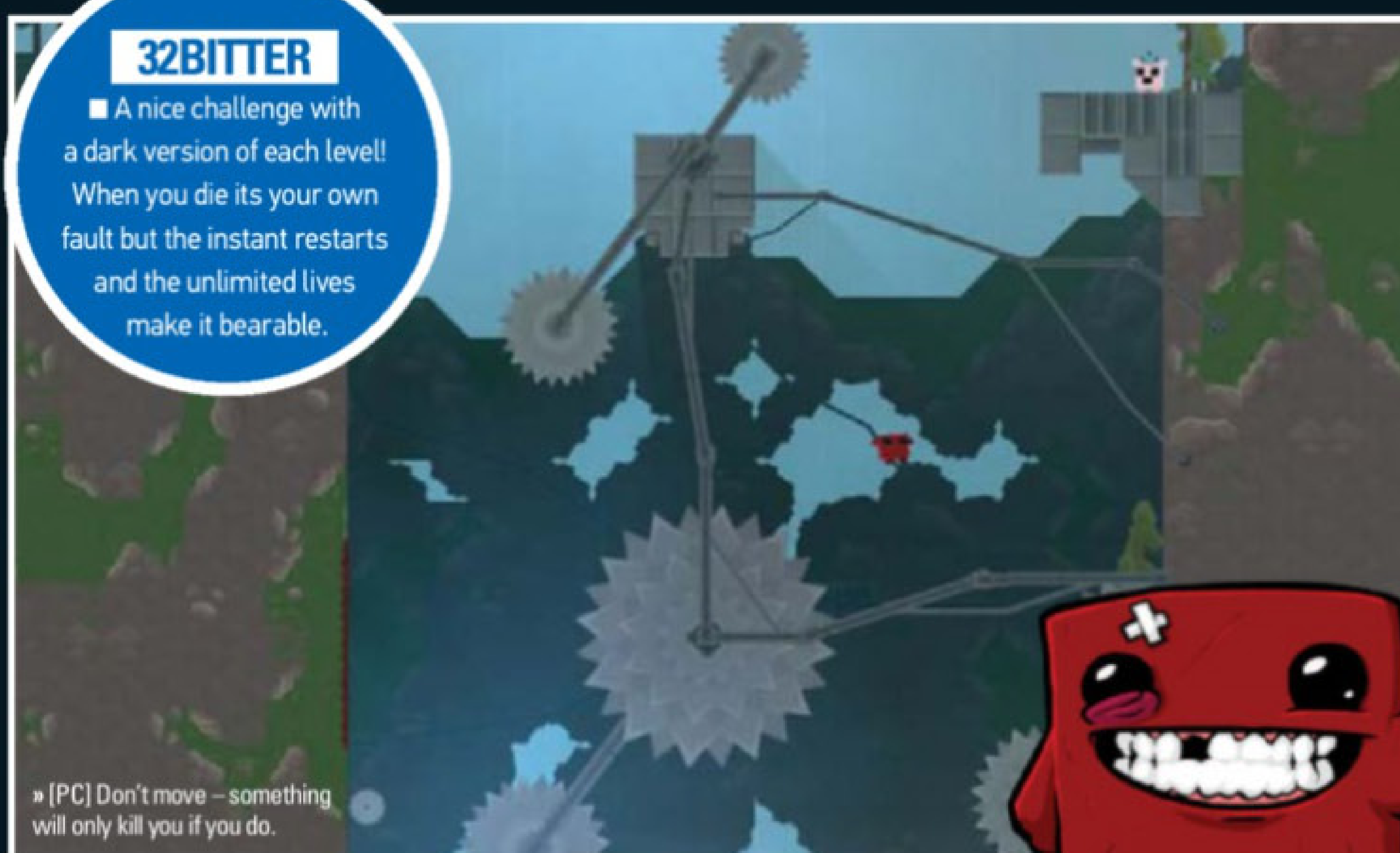
A racing game? Really? Oh yes. And if you've ever played (or even *seen*) *GX*'s Story mode, you'll know exactly why. This series of mission-based races is tricky from the start but by the time you reach the tail end of the campaign, you're looking at a restart every time you even *think* about making the slightest of mistakes. Spinning out on the 20th lap in a GT Endurance race is one thing, but this constant string of do-overs just feels impossible at times.

PRINCE OF PERSIA

FORMAT: VARIOUS **YEAR:** 1989 **DIFFICULTY:** 7

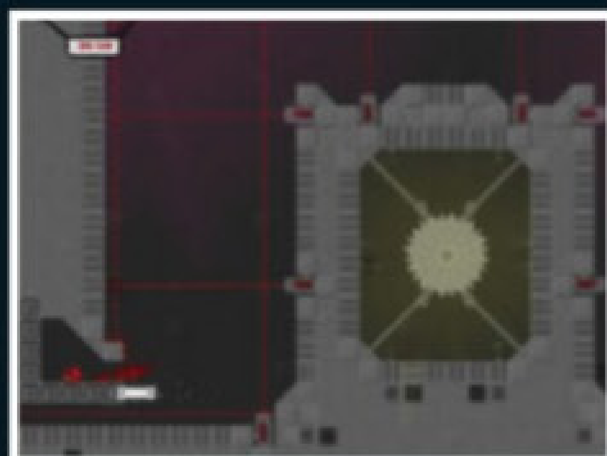
We were surprised by the number of people who brought up Jordan Mechner's classic platformer when we started discussing tough games. Thinking back, though, there were indeed quite a few devious traps and puzzles – from falling ceiling tiles to well-disguised switches – that made it quite the trial-and-error affair at times. The harsh time limit is also a factor, limiting play-time rather than lives and as such potentially setting up situations in which the game became impossible to finish.

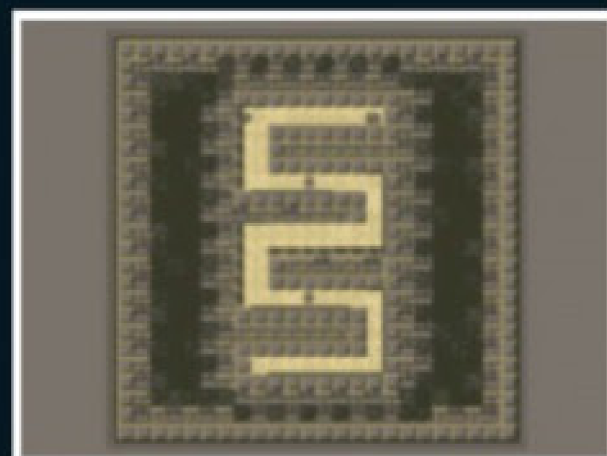



» [PC] Don't move – something will only kill you if you do.

32BITTER
■ A nice challenge with a dark version of each level! When you die its your own fault but the instant restarts and the unlimited lives make it bearable.



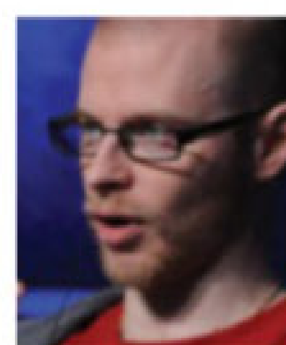


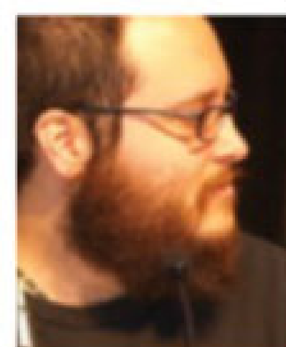




INTERVIEW

Talking tough with Team Meat super-duo Edmund McMillen and Tommy Refenes





Were you concerned about the game being difficult through bad design?
"I think the reason why *Mario* and *Ghosts 'N' Goblins* and all those games were so difficult back then and that their design was more frustrating than difficult was that all those people had previously developed for back then was arcade. With *Meat Boy*, we took the penalty down to zero but kept the difficulty really high. In fact, we could push the difficulty much higher because of that reduced penalty and frustration."

Where did the idea for showing multiple deaths in replays come from?
"There was a video of a hacked SNES emulator where this guy was playing *Super Mario World* and it would take all of his recordings and layer them over one another and I was like, 'oh, I could do that in real time!', so we did. It was just a neat thing, and a good reward too."

RICK DANGEROUS

FORMAT: VARIOUS **YEAR:** 1989 **DIFFICULTY:** 8

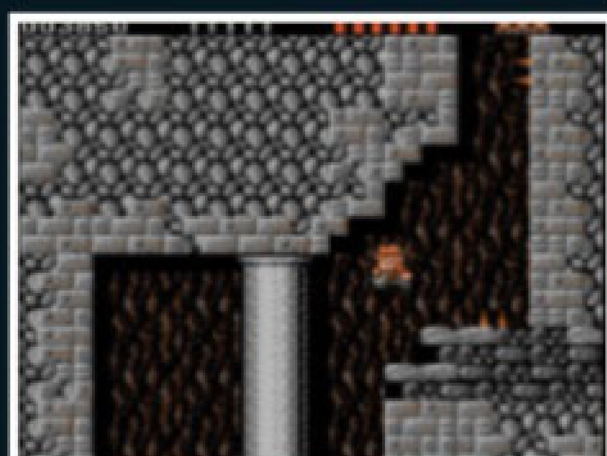
Cheap deaths are something that don't come up all that much elsewhere on this rundown. They're naturally a negative, seen by same as lazy design rather than the kind of pure challenge a gamer really wants to take on. Core Design's *Rick Dangerous* games were met with mixed reviews due to this emphasis on trial and error gameplay – where boulders, spikes or later lasers could come out of nowhere to punish players who had done nothing wrong bar not having played a level before. But regardless, we still have fond memories of both games, the playful approach and design of the *Rick Dangerous* duo making such deaths feel more like slapstick jokes than actual punishments for failure – the gaming equivalent of an exploding cigar or a hand buzzer, and you quickly learn not to accept either.

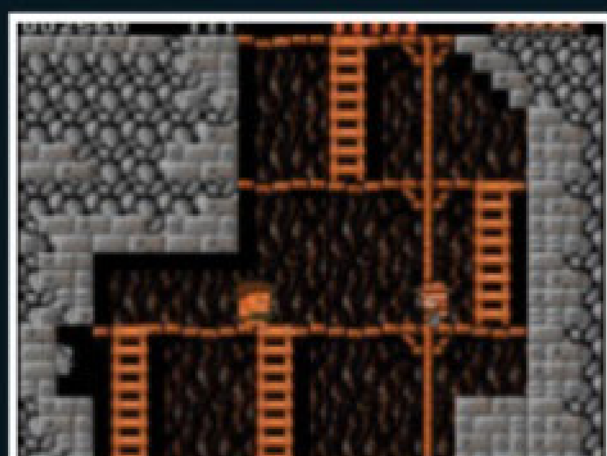
The problem comes from the fact that such hazards are in no way telegraphed. At least in *Prince Of Persia* you'll see a floor panel shake before it dumps you down to a spiky grave, or a roof section wobble before it clatters you on the head. Here, there's no chance to react to many hazards naturally – if you don't know they're coming, you're dead. Generally speaking, skilled players should be able to sight-read a level, as is true of pretty much every classic *Mario* game and even newcomers like *Super Meat Boy*.

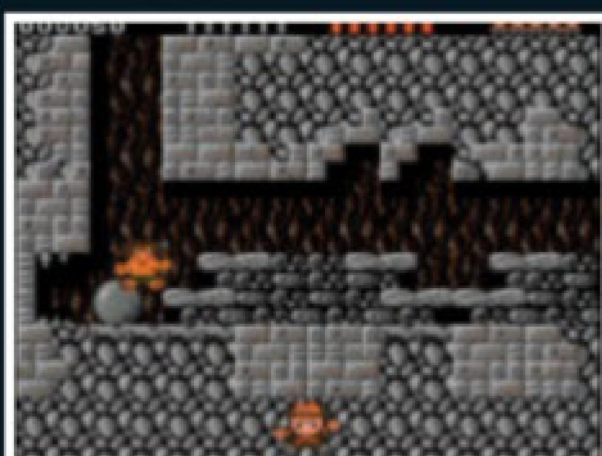
In addition to cheap deaths, though, the games are also examples of offering players extremely limited resources in the form of bullets and bombs. *Spelunky* riffs on this brilliantly, even if the procedurally generated levels don't always offer a way out if you've been overly reckless with supplies. It's a staple of modern survival-horror games too, ensuring a level of tension which, when coupled with the threat of unexpected death with every step, makes for an unforgettable mix. Unforgettable for the wrong reasons, perhaps. But the fact that we're still thinking, talking and grumbling about *Rick Dangerous* 25 years on means that Core must have done something right.

VIMSTER

■ It gleefully kills you at every opportunity. You really need a rock-solid will to keep trying.







INTERVIEW

Simon Phipps talks temples and traps



Did you intentionally make *Rick Dangerous* difficult?

We didn't set out to make *Rick* any more difficult than any game of its time. Back then, the expectation of most games from *Jet Set Willy* to *Monty Mole* was having a limited number of lives and it was only the most talented of players who would ever 'beat the game'. We simply went into *Rick* with the intention of making a game that, for the first time, we thought, would capture that feeling of the opening sequence of *Raiders Of The Lost Ark* – you're going into the ancient temple with nothing more than a handful of bullets and your wits – you have to be constantly watching where you step because at any moment you could spring a trap that's been ready to trigger for a thousand years…

Many feel too much of it is down to trial and error. Would you agree with this?

If we'd known what we know now about game design, we probably wouldn't have made the game like we did and would have missed on making it the kind of game that folks still write to me about 25 years later.

You see, in *Rick*, in our eagerness to try and create that *Indiana Jones* feeling of the unpredictable we broke pretty much every 'rule' about predictable game mechanics that's been written since. As we've learned over the subsequent years, the best approach for most games is to present the player with an object, teach them the rules about it and then reuse that object in the same consistent manner for the rest of the game. *Rick* doesn't do that.

Hmmm… perhaps I'm being a little harsh on myself here – I think what is more the case is that we created a set of mechanics that were predictably unpredictable, if you will; so for example, you'd always see where a blow dart might be coming from, but precisely when it would be fired at you, you wouldn't know.

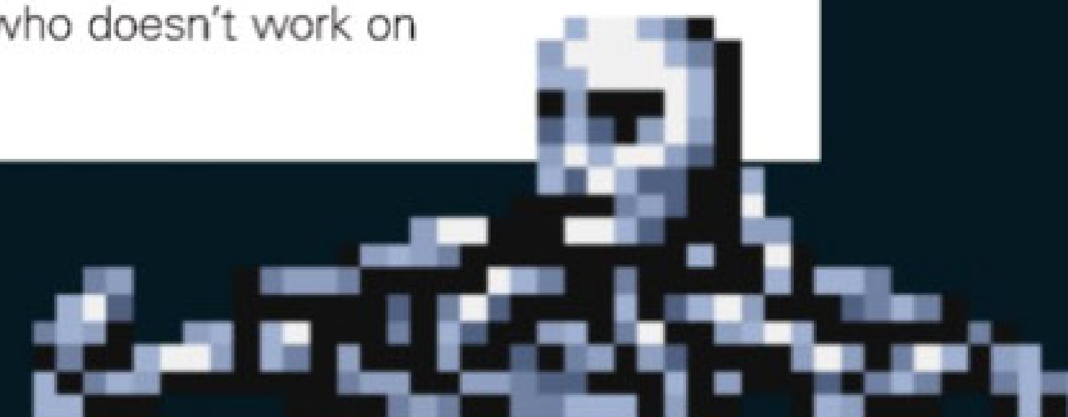
But yes, there are quite a number of 'traps' that you have to learn about by narrowly missing them in that binary *Dragon's Lair* manner where one path leads to death, the other, the way forward. The only way through those is by getting lucky or by trial and error – I think we had far less of those in *Rick 2*.

What I've found interesting looking back over two decades later is that we made effectively an action-based memory game that looked like a regular platform game.

How hard is it to get difficulty balanced on titles like *Rick Dangerous*?

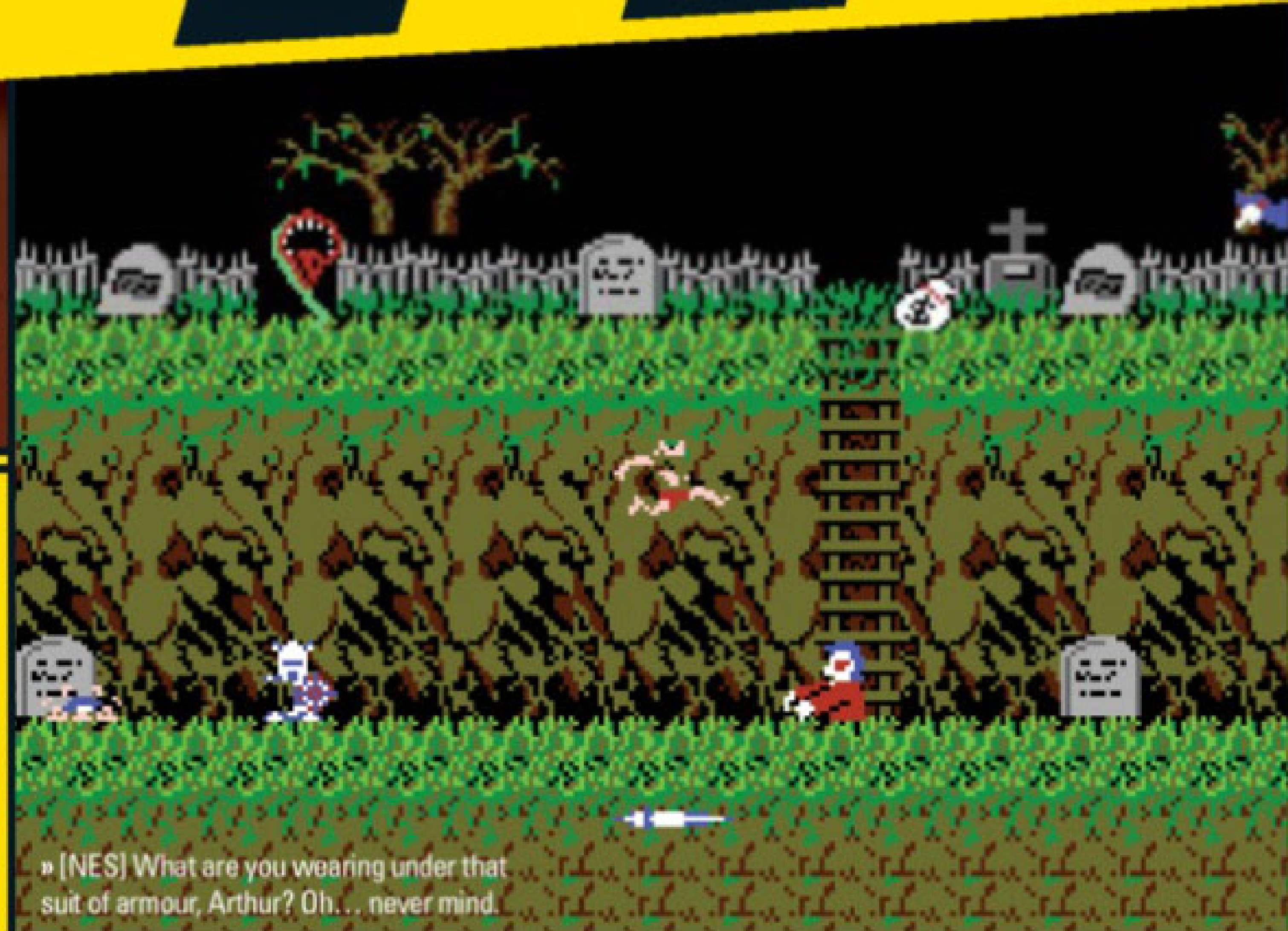
Getting the difficulty balance is always incredibly difficult. When you're making a game you're playing it every day. You play it so often you learn to unconsciously compensate for the quirks in its controls, to work around them without being aware of it.

But that's not the limit – you have more than the insider information about what's coming up in the game; you can visualise where every trigger, every spawn, every collision boundary is, so it becomes impossible to experience your own game as anyone who doesn't work on the dev team would.





THE HARDEST GAMES OF ALL TIME



» [NES] What are you wearing under that suit of armour, Arthur? Oh… never mind.

GHOSTS 'N' GOBLINS

FORMAT: VARIOUS **YEAR:** 1985 **DIFFICULTY:** 9

What, you thought you might get all the way through a feature about hard games without seeing a knight in his pants? Please. Capcom may have had dollar signs in its eyes when it released the original game into arcades but it wasn't until the home ports came along that many of us had the time (or money, for that matter) to discover that this wasn't just another credit hoover – this is a game where skill is everything and insurmountable as the challenge seems, it's perfectly possible with the right combination of knowledge, gear and reflexes.

This game and its follow-ups also introduced us to another Capcom staple, namely repetition. As if finishing the game once wasn't enough of an ordeal, beating the last boss (and with the right sub-weapon, no less) would cast poor Arthur back to the start of the game for an even more arduous slog through the same demonic stomping grounds in the search for the 'true' ending should you manage to clear the more taxing second run. Ever since, pitting players against the same bosses on multiple occasions has been a staple of Capcom games, with everything from *Resident Evil* to *Okami* staying true to the template.



This is one of the earliest examples of a harsh-but-fair game and even though the trials ahead might be enough to scare even the mightiest warriors out of their armour, you only have to watch a decent speed-run to see how skill-centric *Ghosts 'N' Goblins* actually is.

AIRWOLF

FORMAT: VARIOUS **YEAR:** 1984 **DIFFICULTY:** 8



» [ZX Spectrum] No, we don't remember the TV show looking quite like that either.

It was a toss-up between this and *Top Gun* on NES for this slot (seriously, did anyone ever manage to actually land on the carrier?) but with no less than three equally vicious *Airwolf* games, the aerial *Knight Rider* won out. The original home computer version tasked players with rescuing five hostages (read: the same hostage five times) with the many hazards speeding up and becoming even more dangerous with each successful evacuation. By the end, it demands split-second timing and perfect flight control, though the payoff is hardly worth it. The sequel was a more traditional side-scrolling shooter and again we saw a hideous level of difficulty, while the NES game was pretty much just a mess – a 3D shooter on a platform that clearly couldn't cope with being stressed in such a manner.

DISCWORLD

FORMAT: PC, PLAYSTATION **YEAR:** 1995 **DIFFICULTY:** 8

Obtuse puzzles are far from rare in point-and-click adventures, but this might just be the moment the genre broke down. *Monkey Island* wasn't without its fair share of eyebrow-raising solutions but here, logic was exiled forever to free up a seat for the clown prince of zany humour. While puzzles that could be easily deciphered had been the downfall of the genre, taking things to the other extreme as *Discworld* did wasn't exactly the best solution – if you managed to get through the game on your own steam without the repeating dialogue driving you insane, we doff our wizard hats to you. It's like they made an entire game to the same level as *Gabriel Knight 3*'s ridiculous disguise puzzle, and while it's in keeping with the source material, that doesn't make it any less painful.

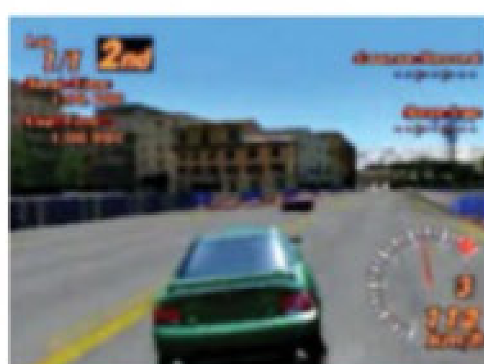


» [PC] This is one game where the solution to a puzzle will *never* be staring you in the face.

NICK R
■ *Discworld* on the PC had some ridiculously obscure puzzles.

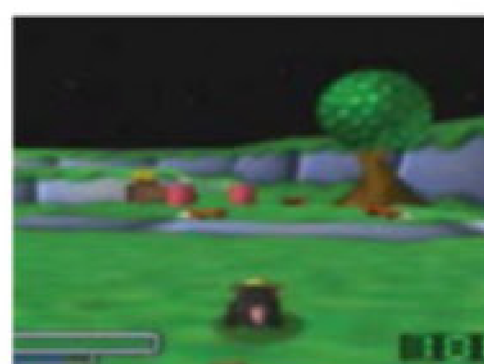
LITERALLY IMPOSSIBLE

Meet the games that just can't be completed…



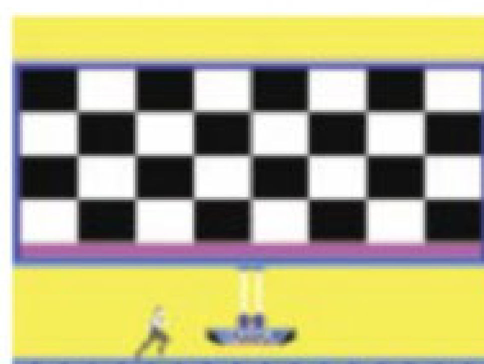
GRAN TURISMO 2

■ Several drag racing events were apparently pulled from the game late in development, meaning that it's impossible to get 100 per cent completion in the first run of copies. After spending so many hours getting close, this revelation was somewhat disappointing.



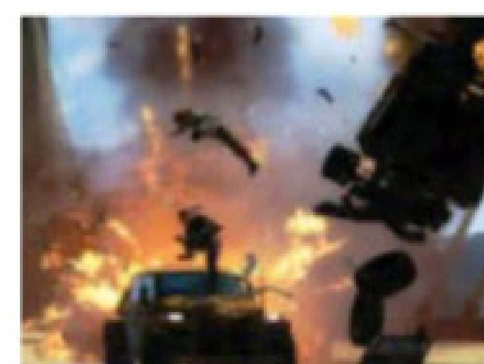
SPACE STATION SILICON VALLEY

■ Another glitch-based frustration – one particular trophy cannot be collected, meaning that full completion (and the associated bonus level) are inaccessible without cheat codes. Does nobody test these things?



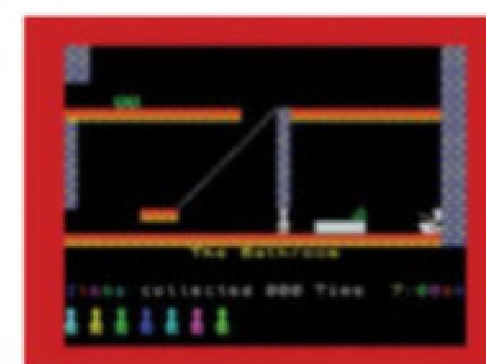
IMPOSSIBLE MISSION

■ Due to random spawning, it's possible for crucial items to be placed entirely out of reach or for punch cards to be used in unintentional combinations that make the game unwinnable. It's rare, but it can still happen.



JUST CAUSE 2

■ As with *Gran Turismo 2*, several missing pieces of content prevent players from hitting that satisfying 100 per cent completion rating. There's an unofficial patch available for the PC version that fixes this, but that's about it.



JET SET WILLY

■ In its original release, a number of bugs existed in Matthew Smith's *Manic Miner* sequel that could actually prevent the game from ever being finished, corrupting several areas of the game and at times interfering with enemy placement.



PAC-MAN

■ Probably the most famous of the lot, *Pac-Man*'s killscreen prevents play (well, accurate play – you can still guess your way through the glitches) after reaching level 256. Not that it would have stopped otherwise, but still.



» [Apple II] Should probably have agreed to those vaccination shots before you left…

THE OREGON TRAIL

FORMAT: VARIOUS **YEAR:** 1971 **DIFFICULTY:** 9

What is an educational game doing on a list of the toughest games ever made, you ask? Well, this one is different – the point of the game was never to 'win', rather to learn about the impossible odds American pioneers were up against. No matter how hard you try or how well you think you're doing, one nasty bout of dysentry and it's all over. Educational title or no, this still remains a landmark title in changing the gaming rulebook and horrible as it is, we're glad it happened – without it, we wouldn't have been blessed with excellent parodies and pastiches such as *The Organ Trail* and *Super Amazing Wagon Adventure*.



GAME OVER

FORMAT: VARIOUS **YEAR:** 1987 **DIFFICULTY:** 10

Not all games on this list are equal. Some are harder through clever design, others through devious design but this one… well, it's just got to be put down to poor design, really. Dinamic's games *were* pretty much all equal though, at least in the sense that they were generally borderline impossible. Between chaotic movement of both character and enemies, a barrage of unpredictable enemy attacks and some horrible colour clash confusing matters further, *Game Over* truly lives up to its name – if the objective was to simply kill the player off then Dinamic made the perfect tool for the job. The studio also gave us the equally horrible *Freddy Hardest*. Endure *Freddy Hardest* to the end and your reward is just a text screen, which reads 'Too good to be true you lousy playboy' – totally worth it..



» [ZX Spectrum] And you thought *Freddy Hardest* was tough…

HARDEST BOSSES

We can hardly bear to look at this horrible lot

QUEEN LARSA (MUSHIHIMESAMA FUTARI)

■ Bullet hell shooters aren't exactly known for being accommodating for their players, but this final boss just takes the piss, no two ways about it. For most of the fight, you can't even see the screen for the blanket of bullets you need to avoid, and she doesn't exactly go down quickly either.

HOW TO BEAT

■ Without a perfect awareness of your exact hitbox and knowledge of where and when to use your special attacks, this fight might as well be impossible. Play it on free-play and you'll eventually get by via brute force, but dodge like a pro and you might just 1CC her. Who are we kidding? That's literally never going to happen.



DR ROBOTNIK (SONIC THE HEDGEHOG 2)

■ Sonic's portly nemesis has already been dispatched several times by the time you reach the Death Egg zone, but this final trial is the toughest of the lot. With no rings to save you – and a Metal Sonic battle immediately before it – a single hit will send you all the way back to the beginning of the area.

HOW TO BEAT

■ Metal Sonic is the first hurdle, but he's easy enough once you master the art of landing two barrages of four attacks when he appears and as soon as he crosses the screen. Robotnik, meanwhile, is a pain, not least due to collision bugs. Stick to patiently attacking the lowered head after he jumps and you should be okay.



KINTARO (MORTAL KOMBAT 2)

■ Midway's gory fighter isn't exactly known for its balancing and sure enough, this striped sub-boss (yep, he's not even the main guy) is a broken mess. He can throw you out of pretty much anything and kill you in a couple of hits – Lord knows how many controllers this guy has cost the gaming world.

HOW TO BEAT

■ Pick Sub-Zero and freeze then batter him. Or pick Scorpion and spear then batter him. If neither ninja option is up your street, be prepared for an arduous fight where your best bet is getting lucky. Oh, and never beat him in the first round. Fighting game bosses *hate* when you do that, and tend to react accordingly.

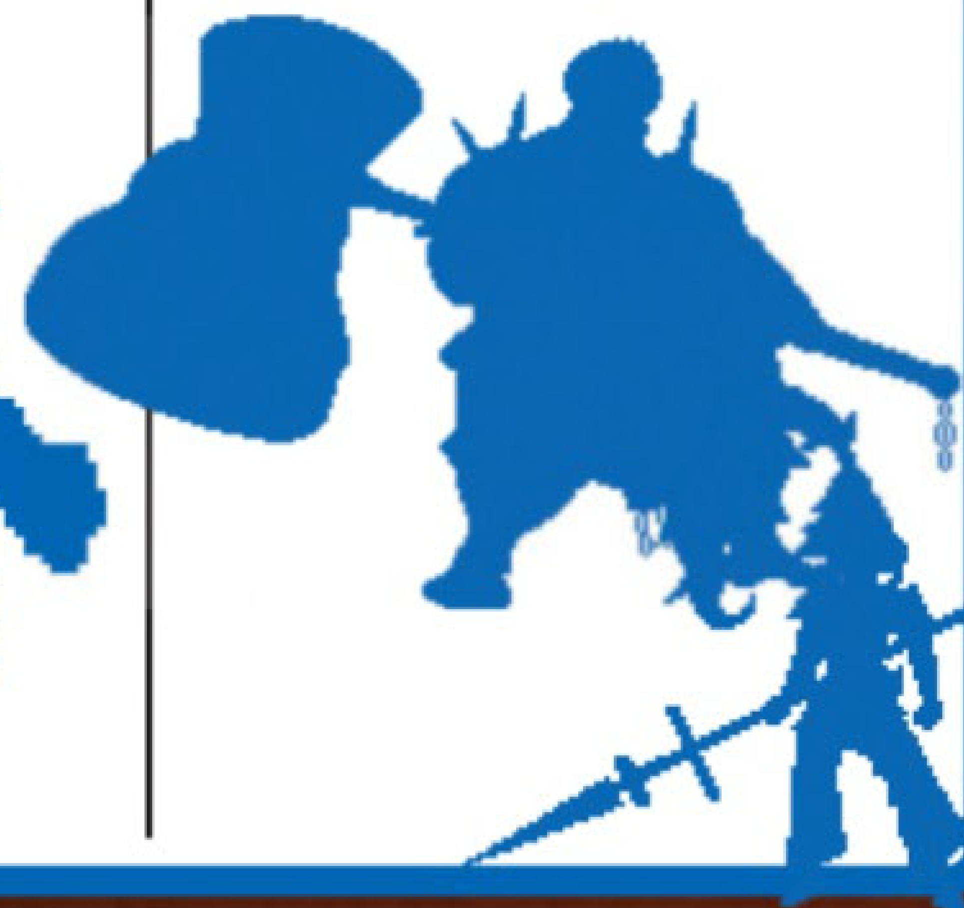


ORNSTEIN & SMOUGH (DARK SOULS)

■ Having struggled through leaking dragons, lethal sewers and towering demons, From's game throws out the rulebook late in the game to set you against two bosses at once. It's one of the most challenging battles in all of gaming, but the sense of accomplishment when you finally achieve victory is unmatched.

HOW TO BEAT

■ Single one of them out (the order in which you beat them dictates the rewards) and don't lose focus. Keep your guard up and be ready to roll at a moment's notice. Or just equip some heavy armour with high Poise and tank your way through them one at a time. These guys have ruined lives – don't let them claim yours.



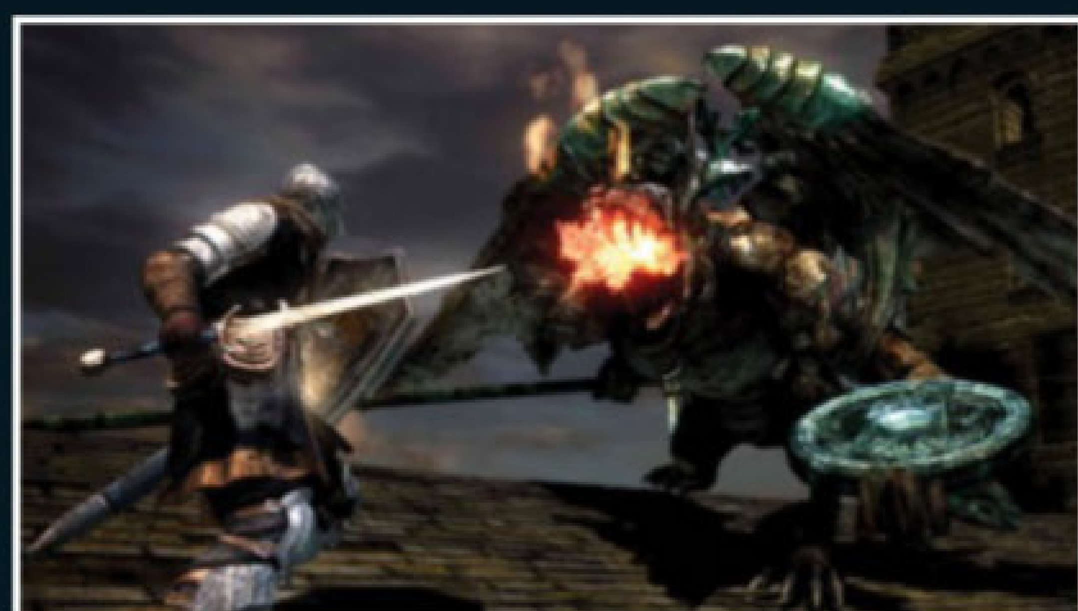
DARK SOULS

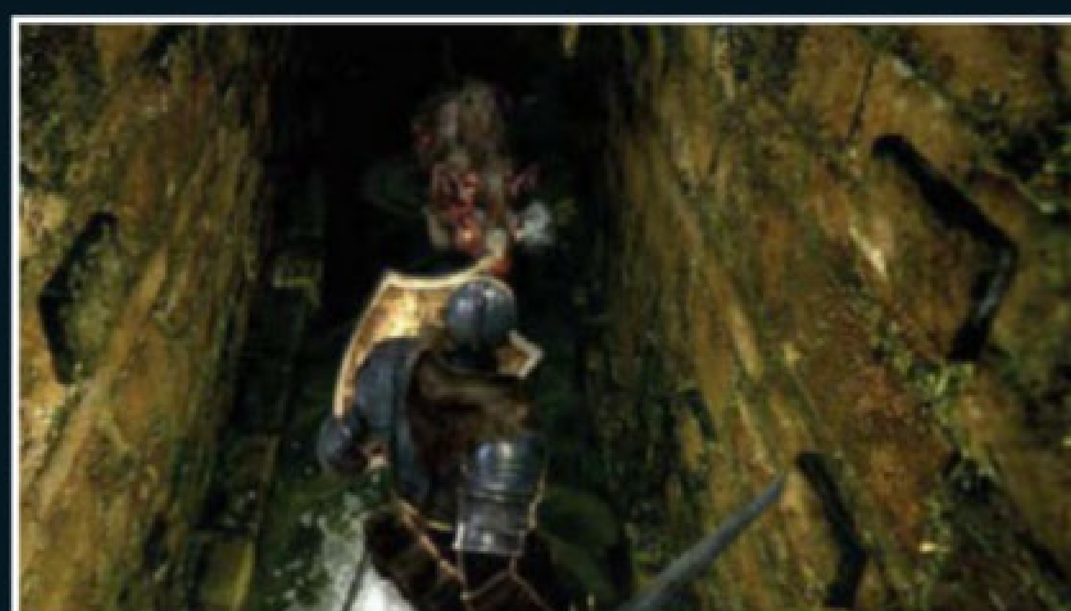
FORMAT: PC, PLAYSTATION 3, XBOX 360
YEAR: 2011 **DIFFICULTY:** 8

In an era where accessibility and empowerment have become all-important, *Dark Souls* – like *Demon's Souls* before it – is a beacon of hope. Its success proves that not every gamer wants their hand held and that many people are still happy to fail over and over again so long as the sense of improvement and satisfaction are worth it. From Software absolutely nails this with the *Souls* games, generally managing to avoid the kinds of cheap deaths that were more common in spiritual predecessor *King's Field* while finding new ways to ramp up the difficulty at every turn.

The opening alone is a good enough reason to include *Dark Souls* on this list, with the first boss stomping in from pretty much out of nowhere before the brief tutorial has really had a chance to begin. Rude as it may seem, this teaches you an extremely important lesson about the game – take nothing for granted and be ready for anything. And it isn't even just about tough bosses, either. Many of the later regular enemies can put you down in a hit or two if you let your guard down, plus even the game's structure is punishing. The open-world approach means it's easy to head the 'wrong' way and get battered by enemies you're nowhere near prepared for, and knowing when to cut your losses and run is key. But with those hard-earned souls piling up where you last went down, greed will often get the better of common sense and the appropriate price will be paid.

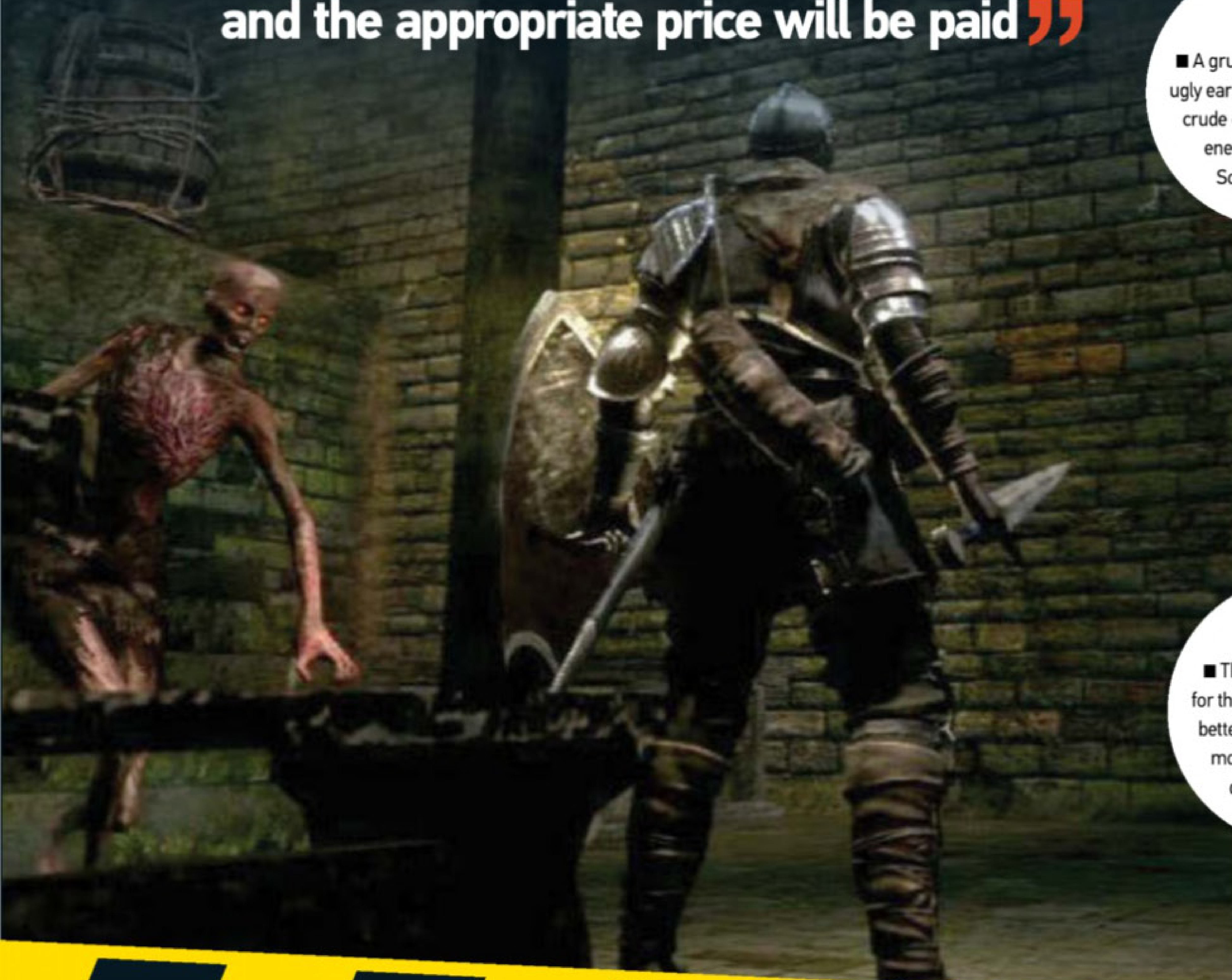
Few games demand such dedication and constant attention as *Dark Souls* and while death will still be frustrating, learning from it is part of the *Souls* cycle. And as if the regular enemies and bosses weren't harsh enough, the constant threat of invasion by other players while online makes for some of the most exciting hardcore gaming in years. If you're looking for your next challenge and still haven't ticked off all three *Souls* games, we heartily recommend you do so. Yes, you'll die a lot. And yes, you'll get quite angry at times. But try telling us that it wasn't worth it after that 'Victory Achieved' message pops up and you're left punching the air and high-fiving yourself.

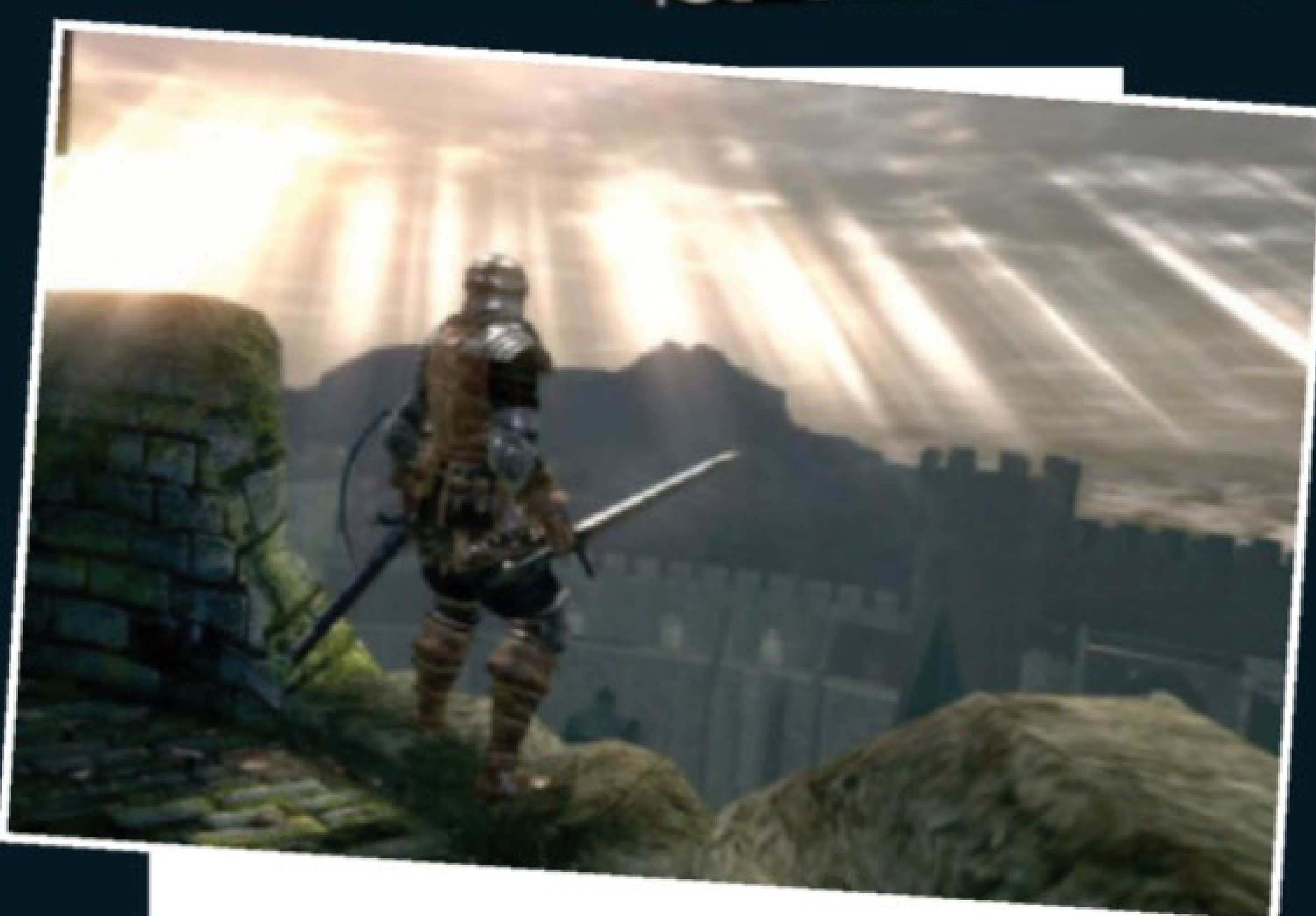




» [Xbox 360] *Dark Souls* helped make hard games popular again, and for that we should all be thankful. And furious. Both is fine.

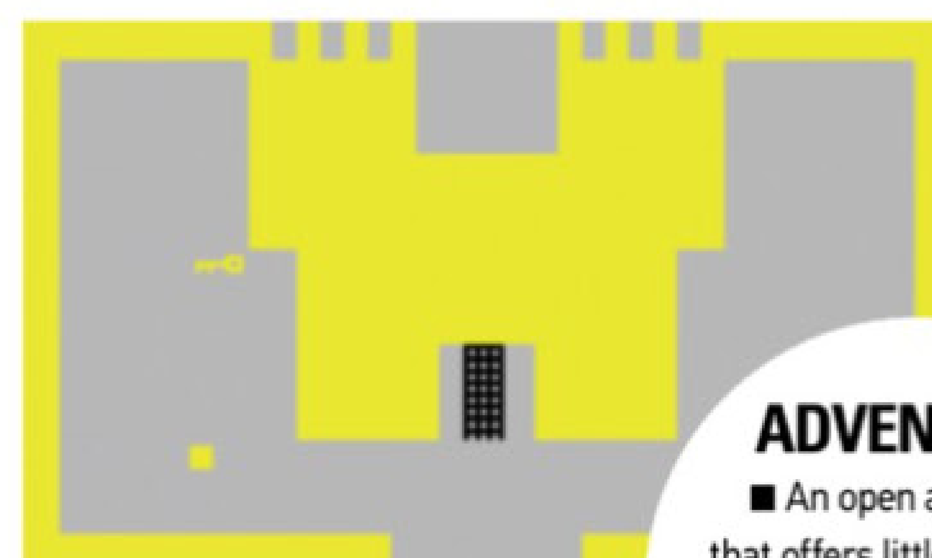
> "Greed will get the better of common sense and the appropriate price will be paid"





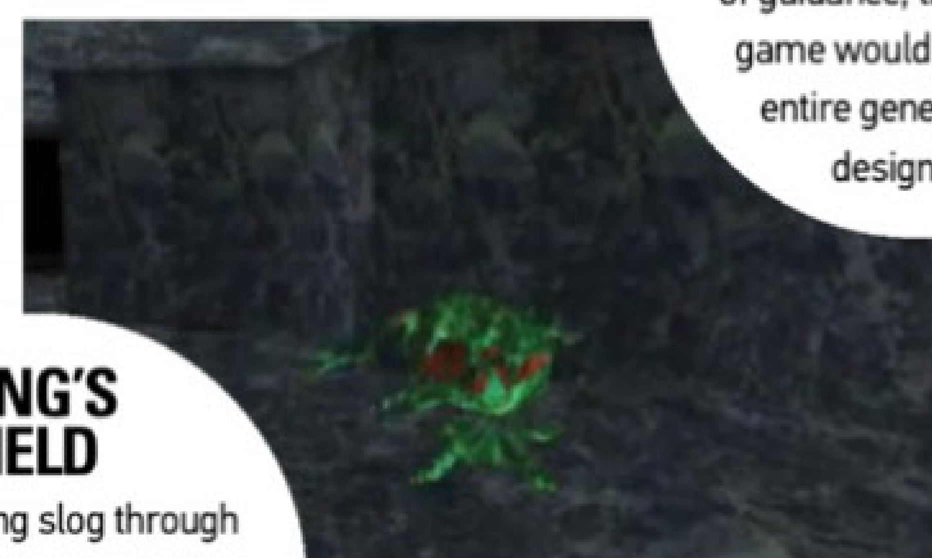
THE ROAD TO DRANGLEIC

The gaming evolution that led to Dark Souls II, 2014's toughest game



ADVENTURE

■ An open adventure that offers little in the way of guidance, this seminal game would inspire an entire generation of designers.



KING'S FIELD

■ A gruelling slog through ugly early polygon graphics, crude design and vicious enemies and traps. Sound familiar?



DEMON'S SOULS

■ Effectively a level-based *King's Field* game with the perspective pulled back to third-person, this was huge.



DARK SOULS II

■ The logical progression for the series – more deaths, better online, more deaths, more bosses and more deaths. Prepare to die indeed.

BULLET HELL

Few genres are as challenging as the shoot-'em-up. With this in mind, Darran Jones revisits some of its toughest examples

ROBOTRON: 2084

FORMAT: ARCADE **YEAR:** 1982 **DIFFICULTY:** 8

***Robotron* is the second Eugene Jarvis shoot-'em-up to make our feature, and it's not hard to understand why.** It distils the genre into its purest form and remains one of the finest – and toughest – twitch shooters of all time. Everything about *Robotron* is beautifully balanced, introducing a steady stream of suitably different enemies that require both skill and knowledge to defeat.

There are no power-ups, no special abilities – it''s just you, those two intimidating joysticks and a seemingly neverending supply of enemies to deal with. You'll get a brief couple of seconds at the start of each round to get your bearings, but you're then thrown into a chaotic warzone that will test your skills to their limits. Add in the brilliant risk/reward system in the form of stragglers who can be saved for cumulative points, and *Robotron* remains one of those rare games – a tough experience that always drags you back for one more go.





"There are no power-ups, no special abilities – it's just you"



SLAP FIGHT

FORMAT: VARIOUS **YEAR:** 1986 **DIFFICULTY:** 9

Toaplan certainly knows how to make tough shooters. *Slap Fight* is mainly memorable because of its insane ultimate power-up that turns your tiny fighter into an insane armada of death. Most mortals never get to experience the sheer power it offers, as they'll never survive long enough to witness it.

Slap Fight is insanely hard for a multitude of reasons. The enemies are frequent and painfully accurate, while ships will constantly sneak up and snipe you whenever possible. It's the lack of reach that really makes *Slap Fight* tough though. Your base bullets only hit halfway up the screen meaning you're constantly dicing with death whenever you try to take down enemies. A truly tough challenge.

HELL FIRE

FORMAT: ARCADE, MEGA DRIVE, PC ENGINE CD-ROM **YEAR:** 1989 **DIFFICULTY:** 9

Toaplan's shooter is aptly named, as it's an absolute bitch to play. The real beauty of *Hell Fire* lies in its clever game mechanics, which evolve around a cleverly designed firing system. Your ship can fire forwards, behind, diagonally and up and down, giving you a tremendous amount of reach. The trick here of course is that you can only fire in one of the directions at a time, which turns Toaplan's game into a deadly juggling act where you desperately try to fend off waves of sneaky enemies that attack you from all sides. The Mega Drive version makes things slightly easier by equipping your ship with an additional power-up that spews fourth a deadly plasma bolt, but ultimately it remains an extremely punishing shooter that separates the men from the boys.



VIEWPOINT

FORMAT: VARIOUS **YEAR:** 1992 **DIFFICULTY:** 10

When we were asking readers about tough shooters, *Viewpoint* came up again and again. First released in arcades in 1992, it's notable for being isometric, featuring rendered visuals and for being bloody hard. Simply surviving the first level for many will be an achievement in itself.



One of the more interesting aspects of Sammy's shooter is that the environments are just as dangerous as the enemies and bosses. You'll often find yourself dodging fast-moving barriers or shooting gates in order to disable them as you battle across *Viewpoint*'s varied stages, and it becomes a reflex test as you weave through bullets, hazards and enemies.

THE HARDEST OF ALL FREDS

■ *Ikaruga* on the DC - I am crap at shooters but blimey Charlie...

IKARUGA

FORMAT: VARIOUS **YEAR:** 2001 **DIFFICULTY:** 9

***Ikaruga* is a tough game at the best of times, but it becomes almost impossible if you try playing it properly.** Like many classic shoot-'em-ups, *Ikaruga* not only features great game mechanics, but also a highly polished scoring system. Polarity is the big thing about Treasure's spiritual successor to *Radiant Silvergun* and it's beautifully presented here.

The developer had already experimented with the concept of flipping between different polarities in *Silhouette Mirage*, but it's far more intelligently presented in *Ikaruga*. Your ship is black on one side and white on the other. The white portion of your ship can absorb white bullets but will get instantly destroyed by black ones, while the reverse is true for its black underside. The kicker here though is that enemies are destroyed more quickly by their reverse colours and that you need to shoot three enemies of the same colour to increase your multiplier. As a result you're continually switching sides, doing everything you can to keep your multiplier up, while avoiding an endless barrage of bullets. Brutal, but oh so brilliant.











Game Over

THE TWO WORDS THAT SAY YOU'RE RUBBISH AT GAMES

» RETROREVIVAL

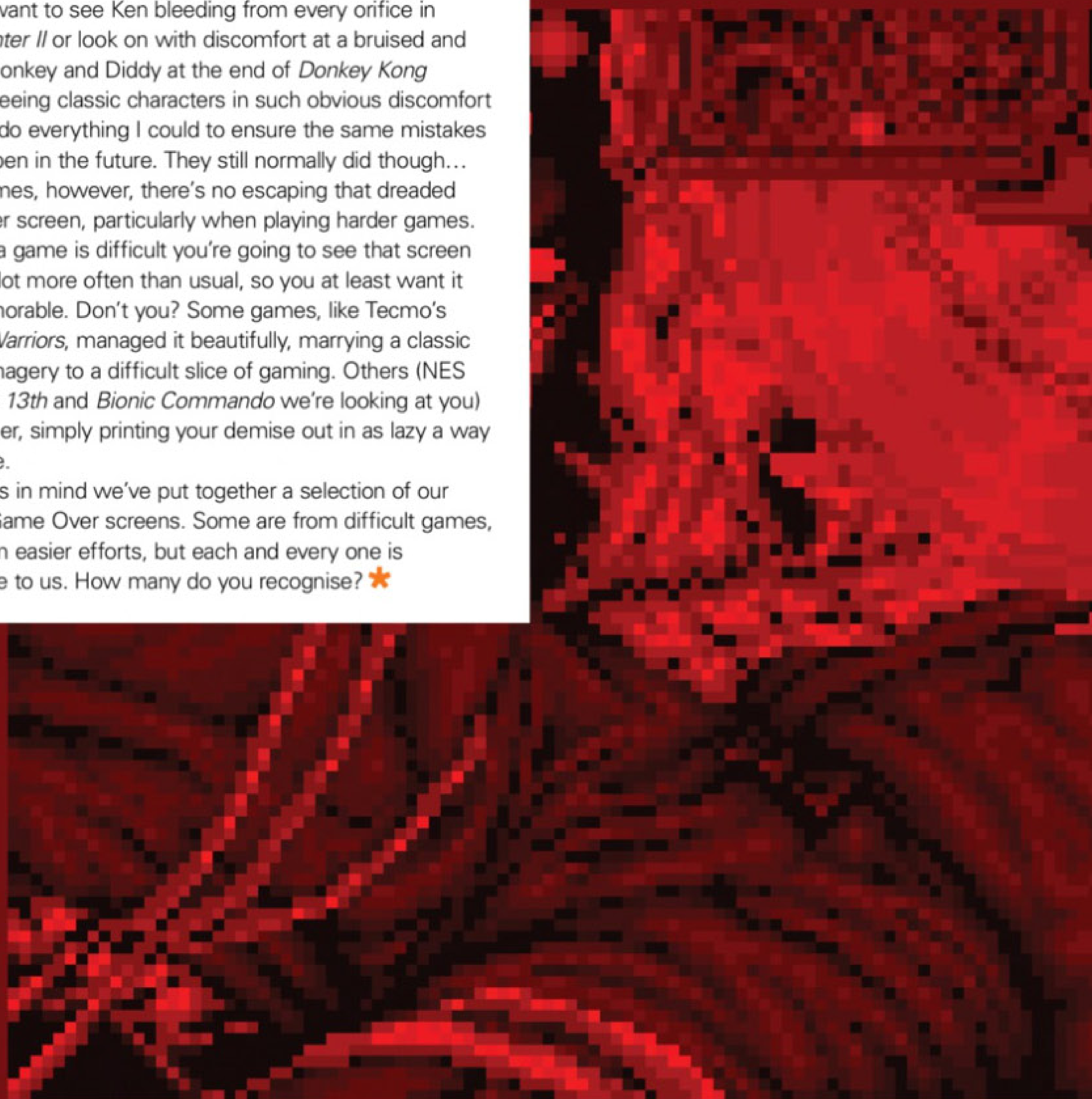


Is there anything worse in a videogame than seeing the dreaded Game Over screen? Nick pointed out that it's there to remind you that you suck at videogames and I'm inclined to agree with him. Of course, the other argument for Game Over screens is that they also urge you on, ensuring that you do that little bit better the next time you play.

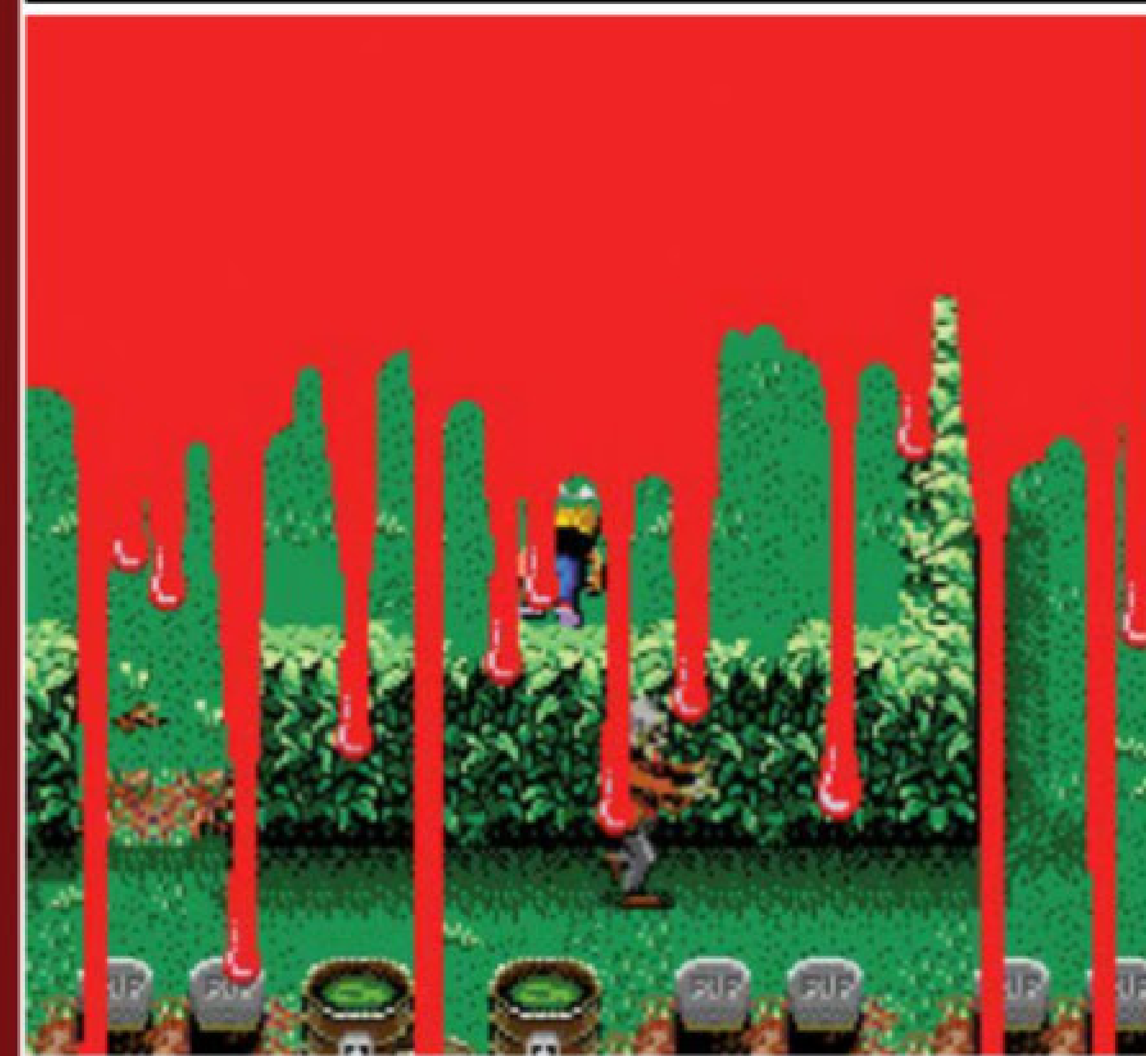
I don't want to see Ken bleeding from every orifice in *Street Fighter II* or look on with discomfort at a bruised and battered Donkey and Diddy at the end of *Donkey Kong Country*. Seeing classic characters in such obvious discomfort made me do everything I could to ensure the same mistakes didn't happen in the future. They still normally did though…

Sometimes, however, there's no escaping that dreaded Game Over screen, particularly when playing harder games. After all if a game is difficult you're going to see that screen a hell of a lot more often than usual, so you at least want it to be memorable. Don't you? Some games, like Tecmo's *Shadow Warriors*, managed it beautifully, marrying a classic piece of imagery to a difficult slice of gaming. Others (NES *Friday The 13th* and *Bionic Commando* we're looking at you) didn't bother, simply printing your demise out in as lazy a way as possible.

With this in mind we've put together a selection of our favourite Game Over screens. Some are from difficult games, so are from easier efforts, but each and every one is memorable to us. How many do you recognise? *



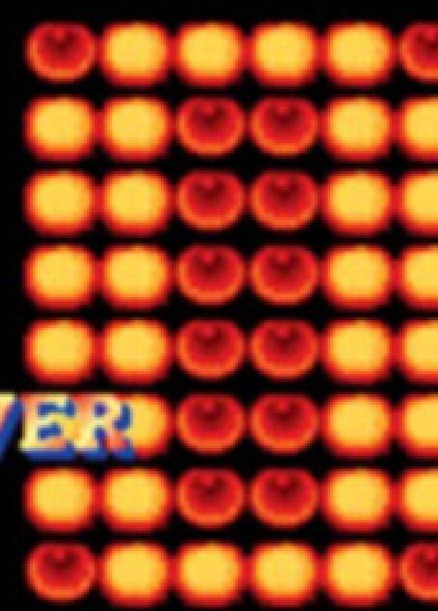
OVER



YOU AND YOUR FRIENDS ARE DEAD.

GAME OVER





GAME OVER





whoops!

DRIVER

In the late Nineties, Reflections thrilled millions of gamers by bringing big screen car chase thrills to the PlayStation, but the years that followed weren't always an easy ride. Nick Thorpe takes the wheel on a drive down memory lane…

Car chases are ace. It's a simple statement, but one which we wholeheartedly believe – seeing a top driver outwit and outmanoeuvre his pursuers at high speed is one of the most thrilling scenes that the world of film has to offer. After *Bullitt* established the modern car chase in 1968, a whole host of car chase movies appeared throughout the Seventies, and it's fondness for these films that served as Martin Edmondson's inspiration in the late Nineties. "I basically grew up on them so they were a huge influence," says Martin, whose studio Reflections had become a prolific developer of driving games during the PlayStation era after experiencing success with *Destruction Derby.*

Driver was designed to allow players to recreate those famous chases, and Martin wanted it to include everything that made them great: "US muscle cars and tyre smoking power-slides, blasting down alleyways and bursting out onto the street through a pile of boxes".

To aid in creating classic chases, the game's design called for large city environments in which players could go anywhere. It was a more ambitious design than the team's previous PlayStation releases, and while *Driver* wasn't the only game doing this at the time – *Midtown Madness* and *Crazy Taxi* both appeared in 1999, *Driver*'s year of release – the modest hardware made the task of realising it much more complex.

"The biggest single challenge was an open-world city on the PlayStation," remembers Martin. The console's limited RAM could only hold a tiny portion of a city at any time, meaning that some creative programming was essential. "We were adamant that we did not want the game to keep pausing to load city data," he explains, "so we had to build our own CD streaming tech that would seamlessly bring in the correct data depending on where you were driving." This was a crucial bit of programming, as without the ability to drive in sufficiently large cities, the design simply wouldn't have worked. "We had many nail-biting moments before seeing the absolute proof that it worked as planned," recalls Martin. "Had it not, then the game simply wouldn't have worked." ▶



> "Tyre smoking power-slides, blasting down alleyways and bursting out onto the street through a pile of boxes"
> Martin Edmonson

> "A driving game will fall apart without a smooth and consistent frame rate"
> Martin Edmonson



» [PlayStation] Tight alleyways provide a perfect way to escape police and wreck some props.



» [PlayStation] The aggression of the police in Survival mode makes for some spectacular crashes.

The open environments weren't just taxing on the hardware, either – the software struggled to keep up in places, as Martin explains. "An open city presented challenges for the AI too, especially as the solution had to be extremely efficient due to our frame rate requirements. A driving game will fall apart without a smooth and consistent frame rate." With the PlayStation being pushed to its limit, we couldn't help but wonder if the team had ever considered shifting the game to a more powerful system. However, according to Martin the PlayStation's large audience ensured that the team didn't stray: "Although by the time we had finally finished and launched I think the Dreamcast had *just* arrived, the PlayStation was dominant."

Keeping the game on PlayStation paid off. The final game arrived in June 1999, and proved to be both a critical and commercial success. Players followed the tale of undercover cop John Tanner, taking on illicit missions from simple getaways to covert tailing of key individuals. The game received praise not only for the openness of its four cities, but the exceptional vehicle physics and excellent mini-games. These included a survival mode in which you were beset by homicidally aggressive police cars and a chase mode in which you were tasked with the pursuit and destruction of a target vehicle. But the most striking inclusion was the Film Director mode which allowed players to edit replays to produce their own car chase mini-movies, a loving homage to the films that inspired the game.

However, the millions of people that purchased the game did share one common gripe – the difficulty of the game's opening challenge, a skill test in the garage. Surely Martin must have wished it had been made easier? "Soon after the release of the game I did, since it was clear that it was too hard," he responds unsurprisingly, "however I think the design mistake was not so much that it was difficult, but that it was an absolute requirement to pass such a difficult test to enter the main game missions. You would never design a game like that these days!"

With this success, the Reflections team immediately moved on to the production of *Driver 2*. It would take Tanner to places he'd never been before, but the selection of the cities he would visit was a harder process than for the original, as Martin tells us: "It was a tricky job for *Driver 2* since we had selected four perfect cities for the first game, many of which had movie connotations and were different in visual style. We went international just to try and continue that diversification. I think if we had chosen four more US cities it would have been less appealing that the cities were becoming samey." Although the technological problems were taken care of during the development of the first game, *Driver 2*'s cities required a bigger team to build, being larger than their precursors and featuring curved roads for the first time.

Tanner's assignments in *Driver 2* didn't just take him to the likes of Chicago and Havana, though – they also took him outside his car. The ability to enter and leave cars enabled Tanner to switch vehicles mid-mission, and even commandeer vehicles. The latter fact caused the press to draw comparisons with the *Grand Theft Auto* series, something that Martin never quite saw: "The first 3D *Grand Theft Auto* didn't come out until a year after *Driver 2* and that game was on PlayStation 2 so it certainly wasn't anything to do with competition. It just felt like a very natural progression really, since we desperately wanted the player to experience more cars than in *Driver*."

Tanner's abilities outside a vehicle were rather limited though, and his animations were… different. According to Martin, the team was once again running into the limitations of the PlayStation. "I remember the graphics of the animated Tanner character coming in for criticism but we just couldn't afford any more detail in the character than we had."



» [PlayStation] If you produced a classic chase, the Film Director mode could be used to edit and save replays.





» [PlayStation] Tanner's character model sported some odd animation in *Driver 2* due to hardware limitations.



» [PlayStation] Curved roads were a new feature in *Driver 2*, allowing players to give the handbrake a rest.

Driver 2 launched in November 2000 and received a good critical response, albeit one that was somewhat weaker than for its predecessor. The new locations and improvements to city design were welcomed, as well as tanner's ability to switch cars and the addition of multiplayer for the driving mini-games. Complaints largely focused on technical issues, with scenery pop-up and slowdown issues coming in for criticism, as well as an uneven difficulty level. Sales remained strong, ensuring the production of an ambitious sequel.

The third game would take the series into a new console generation, and expand upon the features in *Driver 2*. Tanner's work as an undercover cop would take him to brand new international cities such as Nice and Istanbul, and he'd have greatly expanded abilities outside of his car, with fully-fledged missions taking place on foot alongside the driving missions. As a show of faith in the game, voice acting would be delivered by a big-budget cast including Michael Madsen, Mickey Rourke, Ving Rhames and Iggy Pop. On paper, *Driv3r* was a dream product in many ways.

Unfortunately for Martin and the Reflections team, development of *Driv3r* would prove to be a long, hard road. "When we were shown the early specs of the PS2 we designed the engine's capabilities and city detail around this," recalls Martin. "But the PS2 turned out to be *much* harder than we hoped to extract that promised performance from. A nightmare, in fact." Wrestling with the hardware would prove to be a major time-sink, as the team spent large amounts of time trying to bring the frame rate up to the desired levels. In normal circumstances Reflections might have pushed the game back, but it didn't have that option, as Martin explains. "Atari were facing some pretty tough financial circumstances right about then and the game absolutely, positively had to be launched by their set date."

Compromises had to be made, and the on-foot sections bore the brunt of the cutbacks. "We had focused on the driving obviously and then finally moved to the on-foot sections very late in development," remembers Martin. "The real problems came here as ▶

BACK TO BASICS

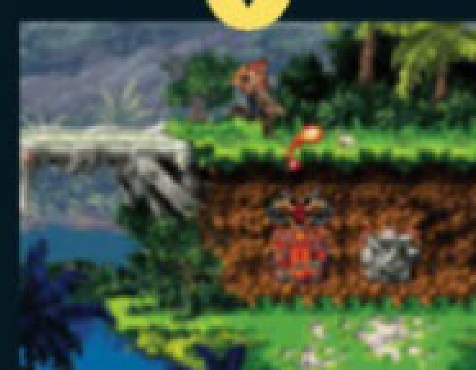
Other series which reversed unpopular gameplay changes

CONTRA

■ Konami has tried to take its classic run-and-gun series in different directions, most recently with *Neo Contra*, but always has to return to the classic style, as seen in *Contra 4*.

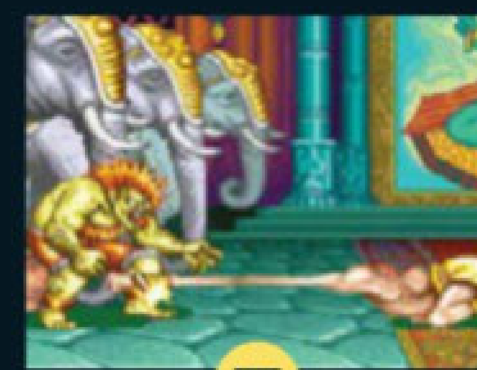




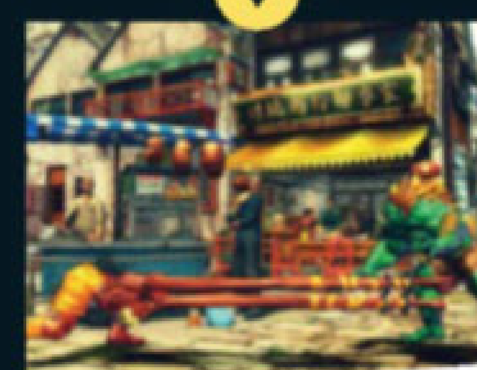


STREET FIGHTER

■ *Street Fighter III* ditched the majority of *Street Fighter II*'s iconic cast, so most players had to learn new characters. *Street Fighter IV* sensibly restored the likes of Guile and Blanka.

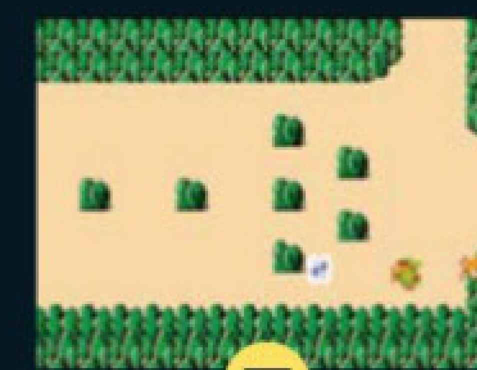




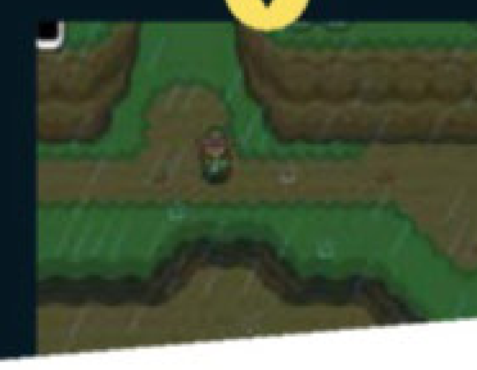


THE LEGEND OF ZELDA

■ The side-scrolling action of *The Adventure Of Link* was a rare misstep for Nintendo's series, and the top-down perspective was restored in *A Link To The Past*.

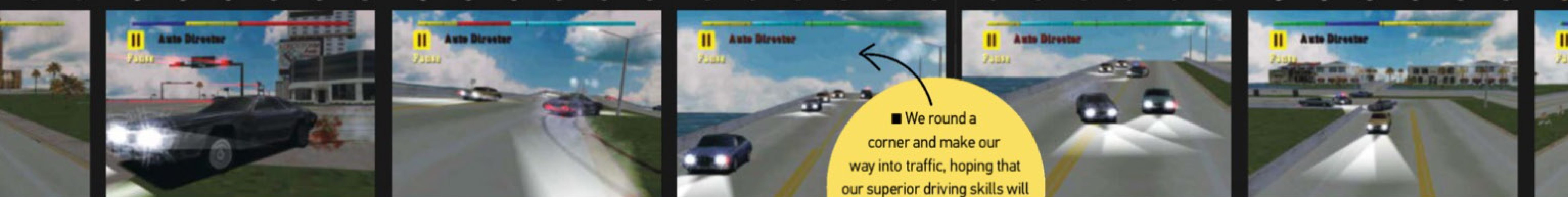








» [Xbox] *Driv3r* introduced widely derided on-foot missions, which had a focus on shooting.



■ We round a corner and make our way into traffic, hoping that our superior driving skills will allow us to weave through and escape the rozzers.


» [Xbox] Vehicle physics have always been a strength of the series, and that remained true in *Driv3r*.


» [PlayStation 2] While on-foot missions were less prominent in *Parallel Lines*, some were still included.

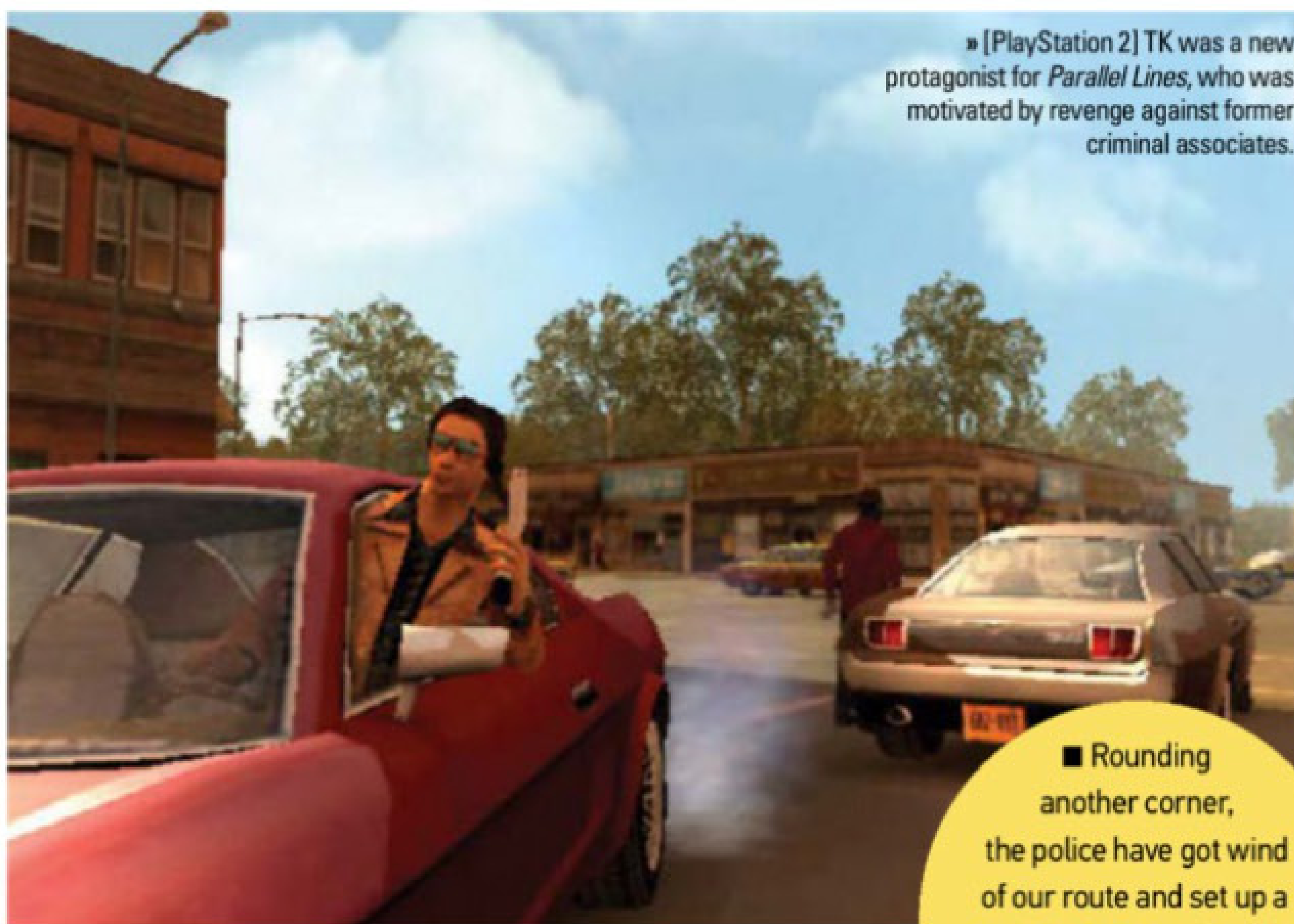

» [PSP] The cops take a dim view of their cars being stolen, so it's an easy way to gain heat.

▶ we didn't have much experience of this kind of thing but worse still just completely ran out of time. At the end of the day that date arrived and we had no choice but to down tools and release, and it is clear to anyone that the on-foot sections were not finished."

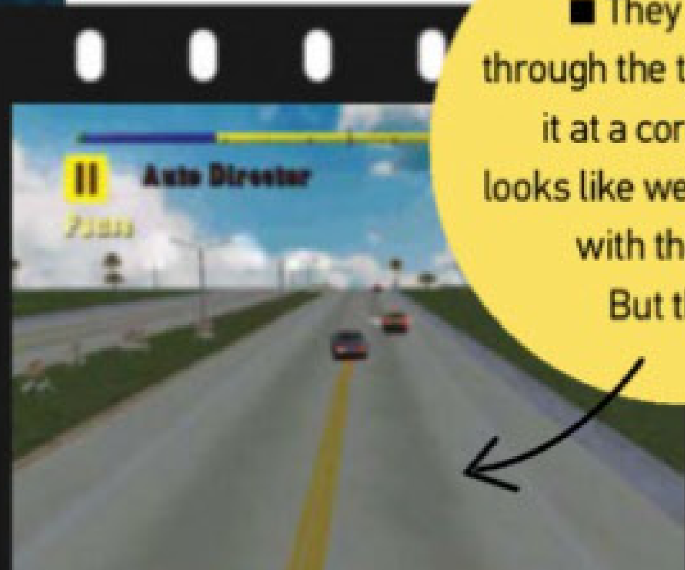
Having finally been released in such a state, it's no surprise that critical reception to *Driv3r* was markedly less positive than for previous games in the series when it arrived in June 2004. It's a reaction that Martin accepts: "For the most part yes, I have to agree with the criticism, as the lack of polish and unfinished on foot sections were clear to see." But while *Driv3r* wasn't a good game, in fairness it wasn't wholly irredeemable – and in this respect, Martin feels that the game received some unfair treatment at the time. "I remember one or two reviews being completely over the top in their venom, with criticism running all the way through *every* aspect of the game including car handling, music, cutscenes, all of which were strong and acknowledged by many other reviews."

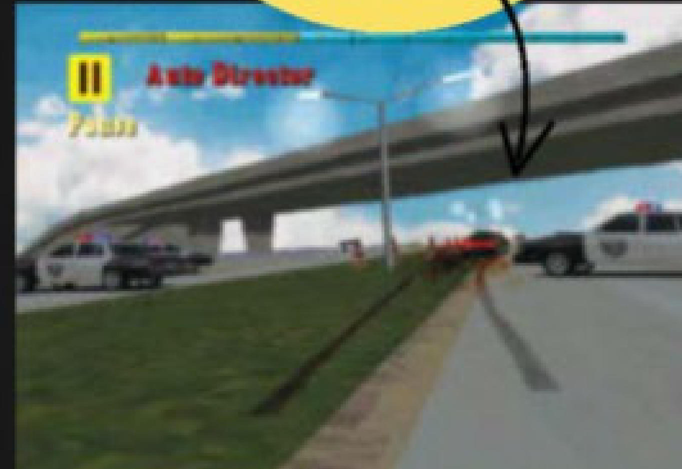
It's fair to say that the game attracted a great deal of venom and it went on to receive many scathing reviews from the press. It ended up with an overall score of 57% on aggregate website Metacritic, an incredibly poor showing for an important triple-A game. "Even if *Grand Theft Auto III*, *Grand Theft Auto: Vice City*, *The Getaway* and *True Crime* didn't exist, *Driv3r* would be a disappointment," wrote IGN. **games™** was equally harsh, giving Reflections' game four out of ten and going on to say "[It's] a game of two halves, neither of which is finished… It is so cursed by glitches and bugs, and so devoid of anything approaching AI, that it's really impossible to believe the code sitting in your local store is anywhere near complete." Things fared little better for the PC release, which arrived a good eight months after the PlayStation 2 and Xbox outings. It managed to amass a woeful score of 40% off 15 reviews on Metacritic, with many reviews focusing on its many bugs and annoying controls.

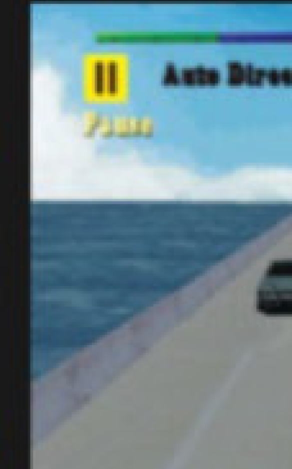
"It was an innovative idea at the time, and really interesting from the point of view of the cars, the music, the style and the city itself"
Gareth Edmonson


» [PlayStation 2] TK was a new protagonist for *Parallel Lines*, who was motivated by revenge against former criminal associates.

Driv3r still managed to top charts and shift a fair number of copies, but the game appeared to fall far short of Atari's sales targets and after providing some input during the pre-production phase of the next game, Martin left Reflections in December 2004. Martin's brother Gareth Edmondson became the studio





■ They made it through the traffic but lost it at a corner, and it looks like we're home free with the swag! But then…

■ Rounding another corner, the police have got wind of our route and set up a roadblock! But we're a bit too excellent for the cops and dart through the middle.

director at Reflections, having worked on the *Driver* series since its very beginning. "The team adapted well, and worked around the gap that was left behind, but of course, the important brand values and pillars were well established already," said Gareth of the changes that had occurred once Martin left. "It also gave a chance for some of the team members to grow as they stepped up to fulfil more senior roles in Martin's absence."

Driver: Parallel Lines marked a departure for the series. The game left behind Tanner to focus on a new protagonist, TK. The game also took place across two time periods, with the first half taking place in 1978 and the second half in 2006. "We wanted a powerful revenge story," states Gareth, "so we set it across a large period of time with the main character having to do time in the intervening time, all the time his anger growing." But it wasn't just a chance to build the story. "It was an innovative idea at the time, and really interesting from the point of view of the cars, the music, the style and the city itself," Gareth explains. For the first time, the series focused on just one city, with the game set in New York exclusively. While this was partially down to constraints on time and budget, Gareth points out that the city area was also much larger and more detailed than in any previous *Driver*. "And of course we had to build it twice!"

The critical reception received by *Driver: Parallel Lines* in March 2006 was much improved over that received by *Driv3r*, with critics praising the more limited use of on-foot missions and lack of bugs, but offering criticism that it was too close to the *Grand Theft Auto* series, without having the variety of distractions that that series offers. It would be the last *Driver* release on home consoles for five years, as the incoming generation of consoles required a major technical overhaul.

The world of *Parallel Lines* was soon expanded in *Driver 76*, a 2007 PSP release that was handled by Sumo Digital. Previous handheld editions of *Driver* had been cut-down versions of the main console games, but *Driver 76* was a side story all of its own. "We knew Sony were not very keen on direct ports of their games onto PSP at that stage and so we knew we needed lots of new content," explains Pat Phelan of Sumo. The portable hardware proved to be a challenge to work with, with RAM limitations and battery ▶

» [3DS] *Driver: Renegade 3D* is generally considered to be a disappointing release, with repetitive missions and graphical issues.





■ One last cop car makes a valiant attempt to nab us, but this time the traffic dodging works. We make it back to our hideout, only to find we've nicked GX4000 games. But hang on, they're *Chase HQ 2* cartridges!

A REFLECTION ON REFLECTIONS

Now known as Ubisoft Reflections, Reflections Interactive has been making games for 30 years. We reflect on some of our favourites…

RAVENSKULL (1984)



■ This is where it all began for Reflections Interactive (or Reflections as it was then known). Published by Superior Software, *Ravenskull* saw Martin working alongside his school friend Nicholas Chamberlain to create an impressive graphic adventure that saw you exploring the grounds of Castle Ravenskull. It's an impressive debut that holds up well.

SHADOW OF THE BEAST (1989)



■ This was the game that convinced many 8-bit owners to make the jump to Commodore's 16-bit Amiga. While it's not the easiest of games, its insanely beautiful visuals, impressive parallax scrolling and haunting music hooked many in. It received numerous conversions and was popular enough to secure two sequels.

DESTRUCTION DERBY (1995)



■ This was Reflections' first driving game and while it looks a little rough around the edges nowadays it still plays amazingly well. It's the well crafted physics that makes *Destruction Derby* so exhilerating to play, with you feeling every bump and jostle as you tear around the crowded track. A sequel arrived the following year and proved to be just as much fun.

STUNTMAN (2002)



■ Originally released in 2002, *Stuntman* thrust players into a variety of different vehicles and tasked them with performing stunts on fictional movie sets. These varied wildly, from barnstorming *Dukes Of Hazzard*-style jaunts through the Louisiana countryside to slick *James Bond*-inspired maneuvers around the streets of Monaco.

TOM CLANCY'S THE DIVISION (2014)



■ Now part of Ubisoft, Reflections has been involved recently in the development of the highly ambitious upcoming *Tom Clancy* game, revealed at E3 last year. Set after a viral outbreak in New York City, *The Division* is a hybrid of third-person shooter, MMO and action-RPG and is expected later this year.

ROAD TRIP

The international cities that host Driver's crazy chases



MIAMI, USA

GAMES: Driver, Driv3r

■ Florida's sunny shores provide the perfect scenery to begin a *Driver* game, kicking off the action in both *Driver* and *Driv3r*.



NEW YORK, USA

GAMES: Driver, Driver: Parallel Lines, Driver 76, Driver: Renegade 3D

■ The Big Apple hosted a fantastic car chase in *The French Connection* and is *Driver's* most-revisited city, appearing in four games.



CHICAGO, USA

GAMES: Driver 2

■ The windy city provides your introduction to *Driver 2*, with its characteristic elevated train lines providing the game with a memorable early mission.



LOS ANGELES, USA

GAMES: Driver, Driver: San Francisco

■ Found in the latter half of *Driver*, Los Angeles is best known in car chase terms for *To Live And Die In LA*.



HAVANA, CUBA

GAMES: Driver 2

■ Cuba's 'city of columns' is a welcome visual departure for the series, with greenery providing a contrast to brown and grey American cities.



SAN FRANCISCO, USA

GAMES: Driver, Driver: San Francisco

■ Having provided the setting for *Bullitt*, San Francisco was an obvious inclusion, with its hills allowing for some amazing jumps.



LAS VEGAS, USA

GAMES: Driver 2

■ According to Martin Edmondson, Las Vegas made the cut in *Driver 2* "due to it's architecture and historical mob-style vibe."



RIO DE JANEIRO, BRAZIL

GAMES: Driver 2

■ The capital of Brazil is the setting for the final stages of *Driver 2*, and brings with it some highly congested streets.



NEWCASTLE UPON TYNE, UK

GAMES: Driver

■ Hometown of Reflections and the only UK city included in the series, Newcastle was hidden away in the first *Driver*.



ISTANBUL, TURKEY

GAMES: Driv3r

■ As well as providing the setting for *Driv3r*'s dramatic final act, historic Istanbul is one of the world's largest and most-visited cities.



NICE, FRANCE

GAMES: Driv3r

■ Though Luc Besson has never brought his famous *Taxi* series to Nice, this city on the south coast of France is your second destination in *Driv3r*.



» [PC] *Driver: San Francisco* brought the series into HD, substantially improving the visuals over previous releases

▶ life both causing the team problems. Critical reaction was mixed, with critics praising the driving engine, but criticising the game's short length and technical issues. When asked if Pat could have changed anything about the game, his response is telling: "I'd have asked for more time from the development gods and given the team an easier ride."

Less successful was the next handheld game, *Driver: Renegade 3D*, an early release for Nintendo's 3DS. It was a disappointing release, with critics calling out some extremely noticeable pop-up and the repetitive missions, mostly following the "pursue and destroy" formula of *Chase HQ*. However, *Driver: Renegade 3D* was a sideshow, arriving on the same day as the next full console game – *Driver: San Francisco*.

For the HD debut of the series, Martin returned to Reflections. "It was hard work and very different to working on the early games but I really enjoyed it, especially as I have such affection for the game," he tells us. The game returned to a focus on pure driving, ditching the on-foot action that had proven unpopular in previous releases. However, the returning Tanner retained the ability to switch vehicles with the 'shift' mechanic – so long as the player has sufficient points, they can swap consciousness to the body of any other driver, an ability stemming from Tanner's comatose state in the plot. "We had an offsite concepting meeting in France and the idea sprang from a single statement – 'you can be anyone'," says Martin in explaining the origin of the feature. "It was difficult to persuade many people of the potential of this system but it proved itself in the end. Especially in multiplayer, it was an absolute blast. The concern was that it would be seen as silly."

After spending so long battling constraints, *Driver: San Francisco* was a welcome relief for the team. "Ubisoft was extremely supportive and constantly pushing for the highest quality possible," says Martin. "They were happy to sign off on the huge additional time and expense brought by targeting 60 frames per second for example – that decision alone probably added a year to the development." The publisher's support ultimately paid dividends – when *Driver: San Francisco* hit the shelves in September 2011, it received a positive critical reception, eclipsing all other *Driver* sequels to become the best-received game since the PlayStation original.

While *Driver* is a series that has experienced mixed fortunes over the years, we can see exactly why loyal fans keep coming back. "*Driver* was a game I wanted to play myself, born out of an absolute obsession with movie car chases," says Martin, explaining the long-term appeal of the series. "Because of that I think it captured what it felt like to be in the thick of a car chase, power-sliding round bends, blasting down alleyways and bursting through the pile of boxes at the end." We're inclined to agree. As we said, car chases are ace – and when *Driver* is at its best, you won't find a better way to experience them. ✱



» [PC] While Tanner can switch cars in *Driver: San Francisco*, it's achieved with a 'shift' ability rather than leaving your vehicle.

CLASSIC MOMENTS

Shinobi III: Return Of The Ninja Master

» **PLATFORM:** MEGA DRIVE » **DEVELOPER:** SEGA » **RELEASED:** 1993

Having battled your way to the end of the fifth stage, a typical piece of frantic *Shinobi* boss music starts playing – but something's amiss. Joe Musashi is standing in the middle of a totally black screen, visibly juddering in time with some massive thuds. Then you see them – a pair of narrow red eyes lights up in the background, before the arena is lit to reveal a gigantic robot which seems to have been inspired by both samurai and Godzilla. It rears its head back and emits a mechanical roar, before launching its inevitable assault.

It's a relentless attack, too. If you're not being pinned down by the lasers firing from the robot's chest, you're probably dodging falling debris, dislodged from the ceiling by its mighty footsteps. If you stray too close to the mechanical monstrosity, you can expect to be punished for it with a blast of fiery breath and when you think you've finally taken the beast down, it has one last surprise for you – it carries on the fight without its head. *

MORE CLASSIC SHINOBI III MOMENTS



Horsing Around

Shinobi III's most immediately exciting new feature is the inclusion of vehicle stages, of which the first is a stage on horseback, in which Joe and his steed need to jump spiked fences and deal with constant ninja attacks. It's a great way to break up the platforming action and features some excellent music, which was recently remixed for *Sonic & All-Stars Racing Transformed*.



Lock-On Technology

Some bosses just don't play fair, and the mutated creature at the end of *Shinobi III*'s third stage is one of them. It first turns up in the background as you try to dodge enormous larval antlions and avoid sinking into the slimy organic matter that litter the area. If you're not too quick, it'll lock its sights on Joe and attack before you ever get a chance to touch it.



Aquatic Action

It's another vehicular moment – this time, an excellent boss battle. Your mechanical foe begins by attempting to hit you with forward-firing shots and simple ramming attacks, but once you've damaged it a bit it will rise from the water and greatly vary its attack patterns, bombarding Joe with missiles, scattered bombs, laser fire and even a charged beam attack.



Impossible Ascent

Having taken down the giant robotic foe from our main moment, the player is now a superhuman in Sega's eyes and is ready for anything. The next stage therefore tasks Joe with defying gravity, leaping up a series of plummeting boulders to victory – all the while enduring the customary assault from a variety of both standing and winged ninjas.

BIO

Following *The Revenge Of Shinobi* and *Shadow Dancer*, expectations were high for the third and final Mega Drive *Shinobi* game. It didn't disappoint, featuring new moves, massive bosses and exciting vehicle sections, as well as another excellent soundtrack. But *Shinobi III* could have arrived in a very different form. The game originally arrived to some fairly positive reviews at the beginning of 1993, but the consensus was that it wasn't quite as good as *The Revenge Of Shinobi*. Unsatisfied with the critical response, Sega extensively reworked the game and returned six months later with the classic we know today.

THE WAR LORDS

MC LOTHLORIEN

If you had picked up a wargame from your local software shop in the Eighties, the chances are it would have been released by the generals of MC Lothlorien. Graeme Mason chats to Mike Cohen, co-founder of the Manchester-based company



» Mike still has to this day the 'big red book' that Lothlorien used to show off its products.




» Mike still owns the replica helmet that was proudly displayed at various Microfairs and in the Lothlorien offices.

One of the extraordinary facets of the games software explosion of the early Eighties was the relative inexperience of many involved. Very few computer courses existed; often programmers came direct from university or were even still in education. The men who formed the software houses themselves usually had business experience but very little knowledge of the product they were actually selling. They had to learn on the job, and learn pretty quickly if they were going to take advantage of a rapidly expanding market.

In the late Seventies, Mike Cohen and Roger Lees were working for the Road Transport Industrial Training Board. "It was a great organisation and a very big thing in the Sixties," remembers Mike, "and Roger and I essentially provided business consultancy to the relevant small companies." Eventually the two men had a growing feeling that having spent much of their time telling others how to run a business, perhaps they should have a crack themselves. "We basically thought we really ought to be putting our money where our mouth was," says Mike.

Retro Gamer is sitting opposite Mike Cohen inside Manchester's voluminous Event City where the second Play Expo is currently in progress. Surrounded entirely aptly by numerous home computers from the last 35 years, Mike can't stop grinning. "Makes me feel so old all of this," smiles the ▶


» [Amstrad CPC] The original *Johnny Reb* was a solid seller and popular enough to spawn a sequel.

IN THE KNOW

■ MC Lothlorien was formed in 1982 as an amalgamation of Mike Cohen's MC Associates and Roger Lees's Lothlorien Trading.

■ Mike Cohen's first computer was a ZX81 bought for him by his wife for Christmas 1981.

■ Lothlorien's first published games were ZX81 and Spectrum versions of *Tyrant Of Athens* and *Warlord*, coded by Mike and Roger respectively.

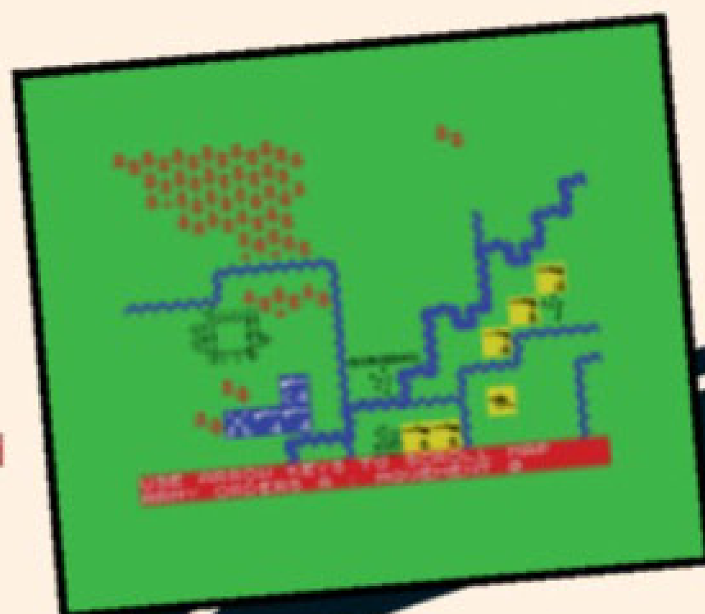
■ The famous Lothlorien helmet was based on a Corinthian design; the huge replica displayed at Micro Fairs was actually a cheap and inaccurate version purchased in an Athens flea market by Mike Cohen.

■ Mike and Roger employed a marketing company to design their various sub-labels such as Actionmaster.

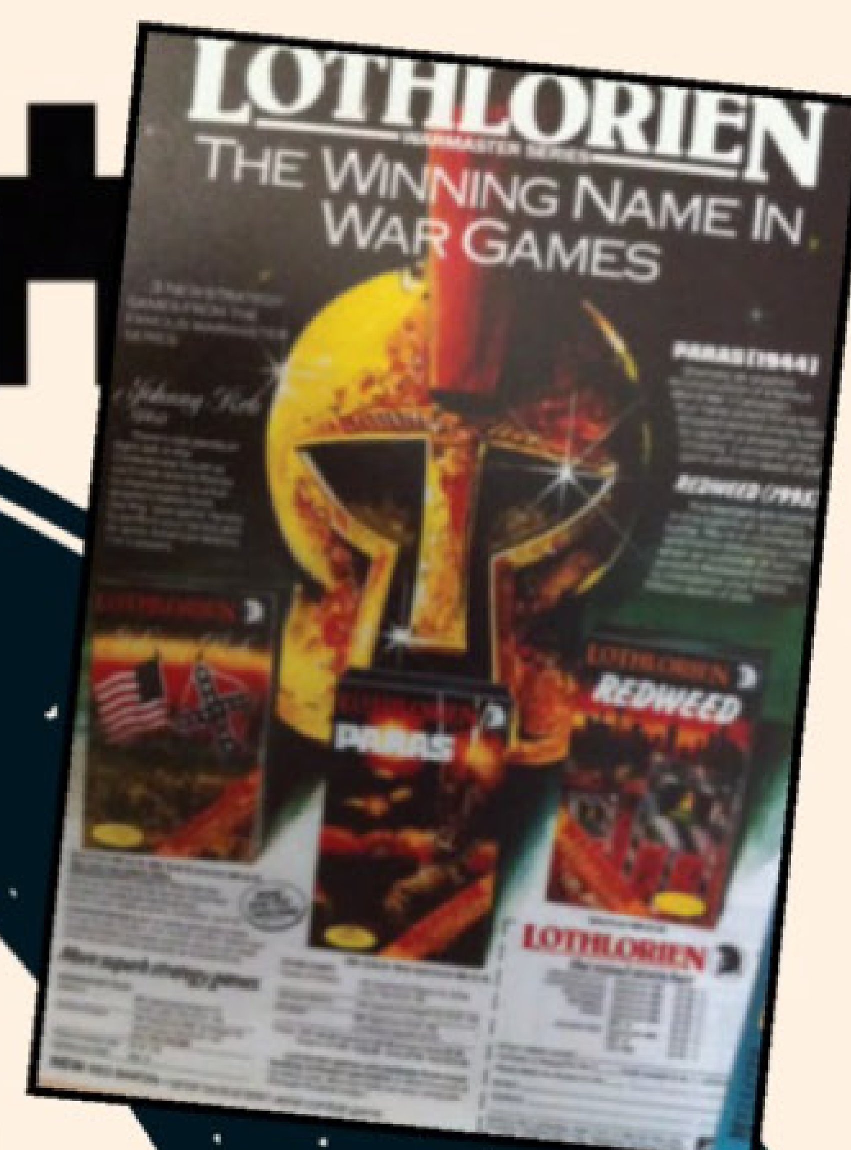
■ Simon Cobb's *Grid Patrol* was a more complex version of his own *Di-Lithium Lift* which was published by Hewson Consultants.

■ Icon Design's Ardwick office housed Lothlorien's computer training school for programmers and was run by David Haynes.

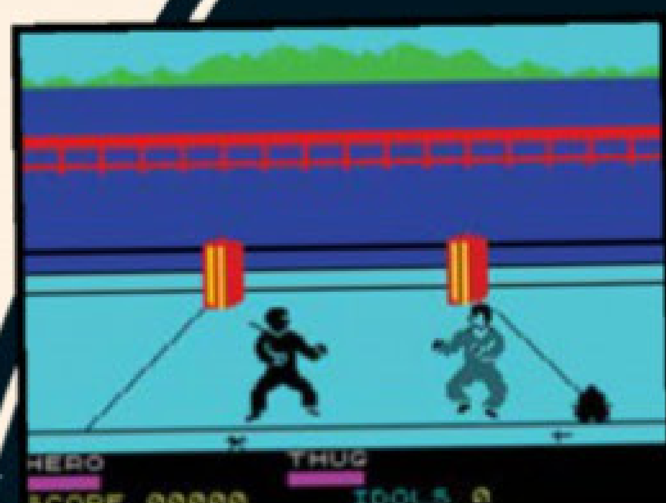
THE DNA OF... MC LOTHLORIEN



Battle Experience
Roger Lees and Mike Cohen had been playing tabletop wargames since the Sixties. They knew what made a good wargame tick.



» This advert helpfully informed a potential customer which year each game was set in!

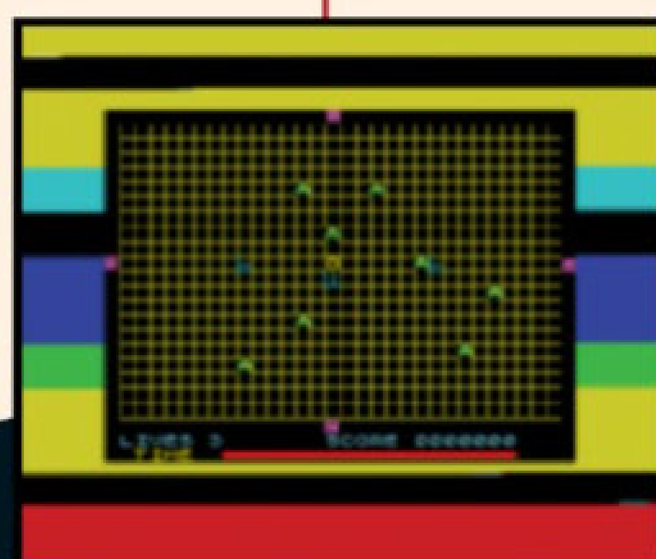


From Publishing to Developing
When publishing became much more capital-intensive in the late Eighties, Lothlorien became developer Icon Design Ltd, producing many games for budget king Mastertronic.

Business Acumen
With experience working for the Road Transport Industrial Training Board, Roger and Mike knew how to make a business work, although sadly even they couldn't overcome the end of the 8-bits.



Branching Out
Despite finding a good niche in Wargames, Lothlorien realised early on it needed an arcade range if the company was to survive.



Know Your Weaknesses
A key factor in battle and in business; Mike and Roger were aware of their shortcomings technically and as salesmen. A technical director (Geoff Street) and coders were swiftly hired as was a marketing partner.



Know Your History
The two men also had a deep interest in history, particularly Ancient Greece (Mike Cohen) and the American civil war (Roger Lees).





» [ZX Spectrum] The popular *Overlords*.

WHERE ARE THEY NOW?



Mike Cohen

After the collapse of Icon Design, Mike focused on his law career, and remains in practice today as a director of The Family Mediation Practice Ltd in Manchester.

Roger Lees

Now retired, Roger returned to business consultancy after Lothlorien folded.

Steve Hughes

After parting ways with Lothlorien, Steve worked for Binary Design. Today he's involved in business software, chiefly for the NHS.



David Bolton

The master coder behind *Johnny Reb 2* moved into business software, developing oil trading software for Morgan Stanley among other projects. Today he works as an independent contractor.

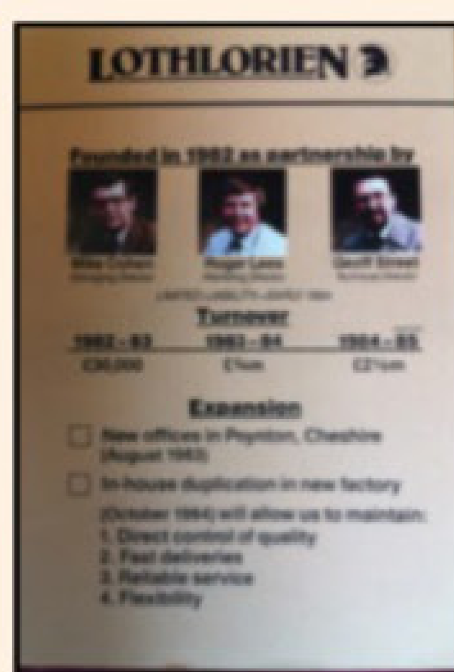


Roger Womack

Roger is still coding today after having found himself at home with football management simulations. He currently runs his own company, Sports Director, whose main seller is *Football Director*, available on iOS, Android and PC – all versions programmed by Roger himself.

Steve Riding

Steve has enjoyed a glittering career in videogames that began with Lothlorien. He joined Psygnosis as a producer, eventually ending up as director of all external development. After that he started Traveller's Tales before building up another company, Lockwood. He has recently set up a new company, working on a well-known IP.


LOTHLORIEN

Founded in 1982 as partnership by

Mike Cohen · Roger Lees · Geoff Street

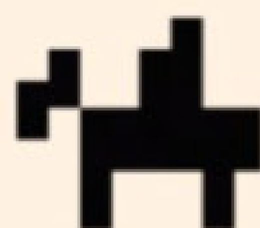
Turnover

1982 - 83	1983 - 84	1984 - 85
[illegible]	[illegible]	[illegible]

Expansion

- New offices in Poynton, Cheshire (August 1983)
- In-house duplication in new factory (October 1984) will allow us to maintain:
  1. Direct control of quality
  2. Fast deliveries
  3. Reliable service
  4. Flexibility

» This introduction to Lothlorien fronted its 'big red book'.



bespectacled and smartly attired former owner of the strategy and wargame software house. "But it's so great seeing all these old machines again – and still working." We've taken the opportunity to meet up with Lothlorien's co-founder in Manchester as he lives just a few miles away from the venue. Tomorrow we shall conduct our interview at Mike's club in the nearby city centre; but for now, like the rest of us, he's enjoying the radiant glow of pixelated nostalgia. **Retro Gamer** spots two young lads staring bemusedly at a Sinclair ZX81 and points them out to Mike. "That was Roger and I 33 years ago. We weren't technically minded and started from scratch as it was all alien to us. But we were looking around for a business to start and we thought there might be something in it."

Roger and Mike met at Grammar school in Manchester at the age of 11. The two boys quickly discovered a shared passion for wargames and would very soon be standing on opposite sides of various miniature battlefields. "I had a 20-33mm sized model army based on Alexander the Great's Macedonian army," remembers Mike, "so I usually took the Greek side and Roger the Persian, playing to actual wargaming rules." We ask Mike where the considerable fondness for Ancient Greece comes from. "I haven't a clue!" he laughs. "I guess at school although my first degree was in science. But I remember being quite into it from an early age and often when I was supposed to be listening to a physics lesson I was reading up on the Peloponnese war instead…"

Many of the companies Mike and Roger were assessing had already started to think about the potential of computerised accounting. "We didn't know a thing about computers but we thought from a credibility point of view in terms of our role that it would be a good idea to at least have a rudimentary knowledge," says Mike. Rather than attempting to create a complex piece of business software, the coding initiate sensibly opted to try and create some type of game instead. But where to start? "I thought about what I liked and my hobbies and I used to play a lot of tabletop wargaming," explains Mike. "And very often one of the problems was that you couldn't get an opponent to play against. So I reasoned, I should teach myself to learn how to program in BASIC and then try and create a wargame of some description."

Retro Gamer is now sitting opposite Mike in a fifth floor room of his club in central Manchester, the chink of our coffee cups echoing around the wood-panelled walls. The steady manic buzz of the Play Expo seems a world away from the quiet peacefulness of the stately home-esque room. "What I started to work out was actually just a simple strategy game," continues Mike, "you could hardly really call it a wargame. It was only really a means of teaching myself BASIC." Drawing on his love of ancient Greek mythology, Mike created the game *Tyrant Of Athens* for the ZX81. "It took me a couple of months, working evenings in my dining room. At the end of it, I



» Geoff Street, Mike Cohen and (far right) Roger Lees at another Microfair.



» *Micro Mouse* dominates this Lothlorien stand at a ZX Microfair while *Two-Gun Turtle* loads. Extra points if you can guess whose stand is next door!



» Two nice ladies from Lothlorien's agency pose in front of its stand at a ZX Microfair.

TIMELINE

1969 MIKE COHEN AND ROGER LEES BEGIN WORK AT THE ROAD TRANSPORT INDUSTRY TRAINING BOARD

1981 MIKE RECEIVES A ZX81 FOR CHRISTMAS FROM HIS WIFE. MAKES A CHANGE FROM AFTERSHAVE AND SOCKS.

1982 MC LOTHLORIEN IS OFFICIALLY FORMED, AN AMALGAMATION OF MIKE'S MC ASSOCIATES AND ROGER'S LOTHLORIEN TRADING.

1983 LOTHLORIEN BEGINS TO HIRE CODERS (SUCH AS SIMON COBB) AND MIKE AND ROGER BUSY THEMSELVES CONVERTING THEIR ZX81 GAMES TO THE NEW-FANGLED ZX SPECTRUM. GEOFF STREET JOINS AS TECHNICAL DIRECTOR.

1984 A BUSY YEAR AS LOTHLORIEN EXPANDS, RELEASING MANY THIRD-PARTY (AND IN-HOUSE) ARCADE GAMES AS WELL AS MORE STRATEGY TITLES.

1985 STEVE HUGHES LEAVES, STEVE RIDING JOINS, AS DOES ROGER WOMACK. LOTHLORIEN AGREES A DEAL WITH ARGUS PRESS TO DISTRIBUTE AND MARKET SOME OF ITS GAMES. THE BULGE IS THE FIRST.

1986 LOTHLORIEN SUBSUMES THE REMAINS OF A'N'F WITH DOUG ANDERSON BECOMING A DIRECTOR OF THE NEW COMPANY, ICON DESIGN.

1987 THANKS TO MIKE AND ROGER'S GOOD RELATIONSHIP WITH RON HARRIS (WHO WORKED PREVIOUSLY AT ARGUS), ICON DESIGN DEVELOPS MANY CONVERSIONS FOR MASTERTRONIC.

1988 AS THE BUDGET MARKET BEGINS TO WANE, THE WORK DRIES UP FOR ICON DESIGN AND LOTHLORIEN. OVER-EXPANSION HAS ALSO LEFT THEM EXPOSED.

1989 FOR THEM THE WAR IS OVER: ICON DESIGN/LOTHLORIEN CLOSES ITS DOORS AFTER AN EVENTFUL SEVEN-YEAR BATTLE.

felt I'd achieved something because on the way I'd learned a little bit about computers and created something that was a bit of fun." When Mike showed his creation to some friends, they asked if he'd thought about trying to sell it. "It was about the time when people were selling games through mail order, mainly by advertising in magazines," notes Mike, "but I thought it was ridiculous. They persuaded me though and I went for it and placed an ad. I estimated that if I managed to sell 20 copies at a fiver each then it would pay for the advert and really feel I'd achieved something!"

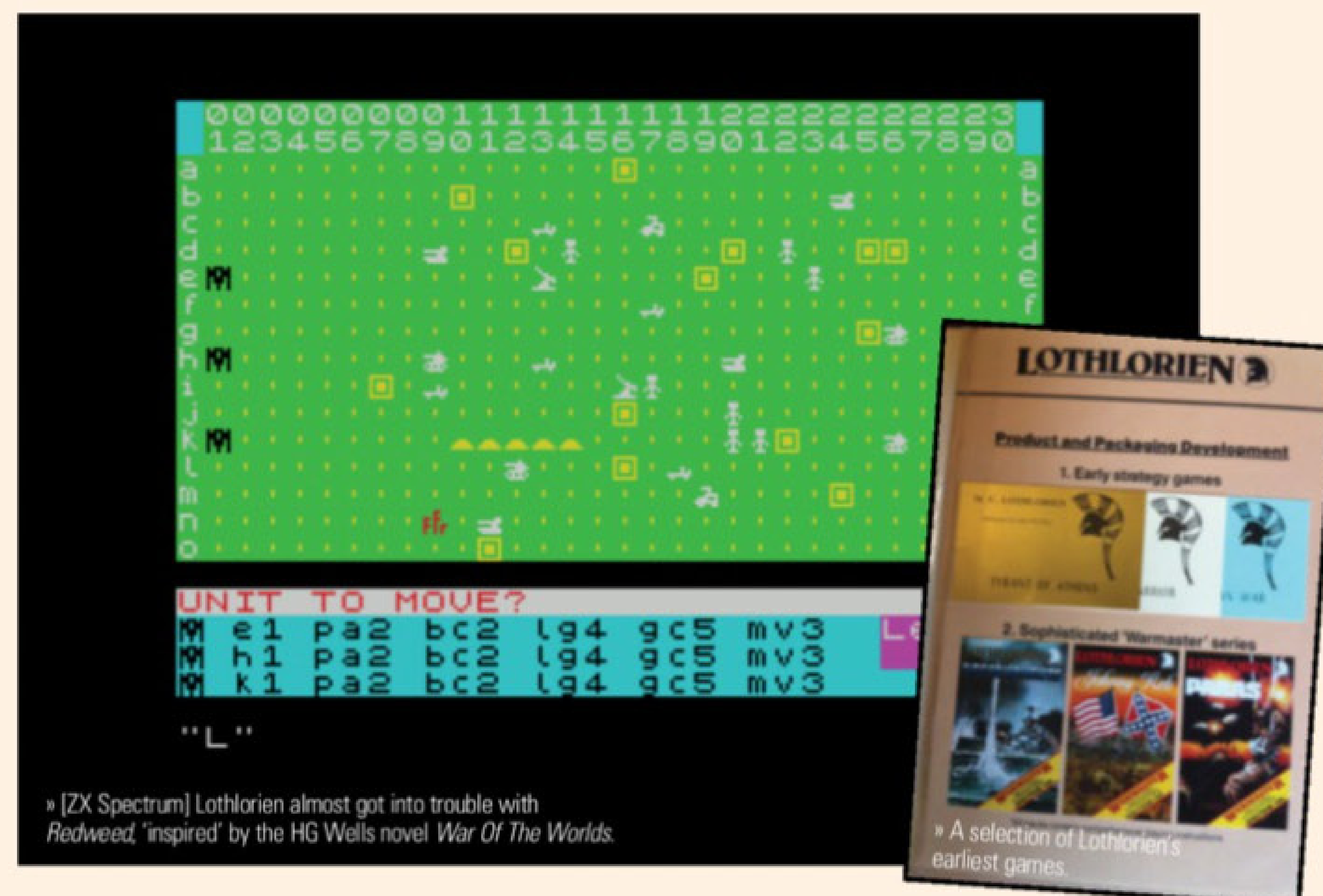
Mike's advert, under the name MC Associates, duly appeared in *Your Computer* but not before a light-hearted argument with his wife. "Bridget thought £95 for a quarter-page advert was throwing money away," remembers Mike, the memory of this strange domestic altercation bringing a grin to his face. "So I offered her a bribe: I promised her if the game made any money, I'd buy a dishwasher out of the profits." Hence the dishwasher game was born and fortunately for Mike (or unfortunately, depending which way you look at it), *Tyrant Of Athens* sold 200 copies within two weeks. Mrs Cohen was presumably very pleased – as was Mike with the sales of his first effort.

Enthused by Mike's success, Roger Lees purchased a ZX81 and began coding. Using the name Lothlorien, he produced a similar text-based strategy game called *Warlord*, based on one of his own particular favourite period of history, feudal Japan. Mike had already created a follow-up to *Tyrant Of Athens*, *Roman Empire*, and it quickly proved to be even more popular than its ancient Greek predecessor. Yet despite these successes, Mike and Roger were still working separately on their games, with their wives helping them to copy tapes, photocopy instructions and post the numerous packages off. Thank goodness for all that spare time saved by not having to do the washing up, quips **Retro Gamer**. Mike smiles. "I guess Bridget was the associate. She was certainly a great help." After six months of Roger and Mike working separately on selling their respective games, sales were strong enough to suggest a step forward. "We were quite busy so thought we'd either better form a company and start doing it properly or just stop and concentrate on our day job," says Mike. The two men joined forces and names. MC Lothlorien was born.

> **"We were looking at marketing and circulation because we were having a lot of difficulty breaking into the shops"**
> MIKE ON THE BEGINNINGS OF THE DEAL WITH ARGUS PRESS

The new company began in earnest in the summer of 1982. Re-releases of Mike and Roger's ZX81 games were the first games, followed by the respective ZX Spectrum versions. But they were still working from home. "We started to become aware that there were larger volumes to be had and so we began to get our tapes produced professionally," explains Mike, "which meant I was having these huge boxes delivered to the house all the time." Clearly some dedicated premises were urgently required if Mike and Roger were to avoid divorce proceedings. "Our wives were getting fed up with these boxes and thousands of cassettes everywhere, so we bought an office in Poynton and moved the operation there, taking on a couple of programmers and secretaries. While I had been working at home I had a shorthand typist who used to come in and do my correspondence and stuff because we had no computers to do word processing back then. It seems so crazy now."

One of those early programmers was Steve Hughes who approached Lothlorien to see if they could collaborate together. "I'd written a game called ▶

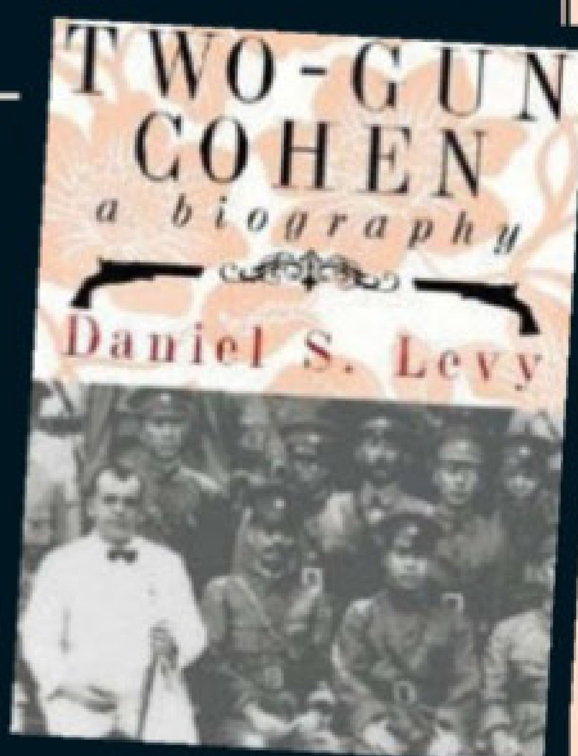


» [ZX Spectrum] Lothlorien almost got into trouble with *Redweed*, 'inspired' by the HG Wells novel *War Of The Worlds*.

» A selection of Lothlorien's earliest games.



THE LEGEND OF MORRIS 'TWO-GUN' COHEN



The unusually titled MC Lothlorien game *Two-Gun Turtle* was inspired by Mike Cohen's uncle, the legendary Morris 'Two-Gun' Cohen. Born in Poland in 1887, Cohen's family emigrated to London shortly after his birth. He was shipped off to Canada in his late teens in an attempt to reform his errant ways. Cohen wandered throughout Canada's western provinces and when he came to the aid of a Chinese man who was being robbed (an act unheard of at the time), his reputation within the Chinese community grew immeasurably. Post-World War One (where Cohen saw action at Ypres) Cohen found himself ensconced with Sun Yat-sen, Chinese revolutionary and one of the founding fathers of the Republic of China. Cohen became a trainer for Sun's army as well as his personal bodyguard and began the habit of carrying a second pistol, hence the evocative moniker. After Sun's death in 1925, Cohen worked for several South Chinese leaders, gaining the sinecure rank of general before joining the fight against the Japanese invasion in 1937. He died in 1970, surrounded by family, a clutch of myths and yarns and an undeniably high regard still in his spiritual home of China.



» [C64] The obligatory scrolling shoot-'em-up for the Commodore 64 – *Scarper!*

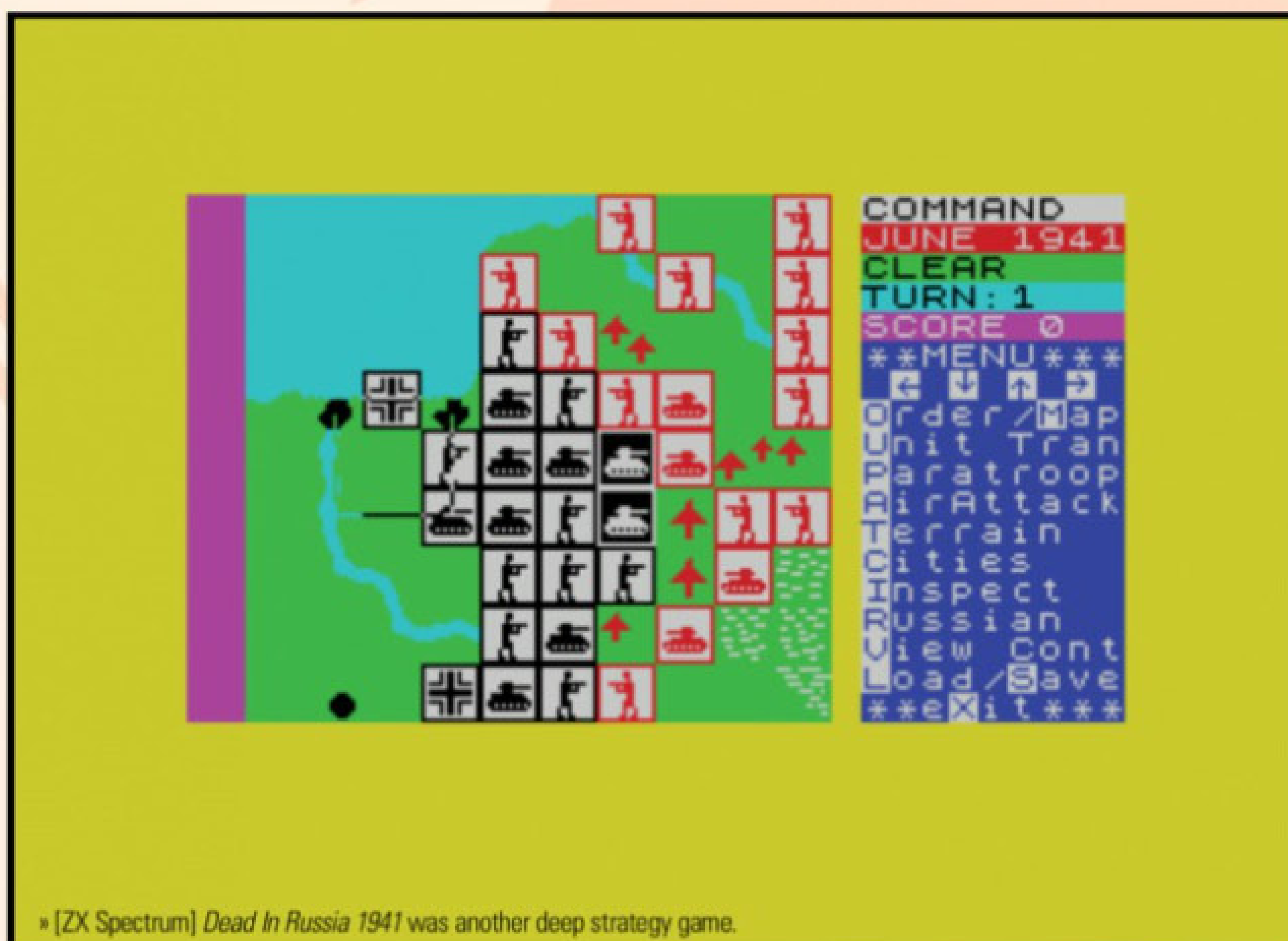
> **"We'd looked at diversification and in some ways maybe we were naive"**
>
> MIKE ON LOTHLORIEN'S OVER-EXPANSION IN THE LATE EIGHTIES

▶ *Beetlemania* and another called *Bedlam*, both for the ZX Spectrum," says Steve. "My partner at AWA Software, which was a really tiny part-time venture, had enough so he made the contact and introduced me to Mike Cohen." Steve would soon be developing further arcade games as Mike and Roger sought to expand their roster of software. "Roger and I weren't really programmers," says Mike, "we both knew a bit of BASIC and a little more but that was it. We knew we had to do something other than strategy in order to give ourselves a little bit of a sales boost. Steve had already written a couple of games and his code was very, very, good." Despite not working directly on the MC Lothlorien payroll, Steve Hughes often visited its office. "Their office was above a couple of shops and dominated by a receptionist called Arline who had a very expressive personality and a penchant for announcing she was 'shaking the dew from the lily' whenever she went to the loo," he laughs.

One of the more successful games Steve Hughes developed stemmed from an original concept by Mike Cohen. "I thought of a great idea for a game called *Micro Mouse Goes Debugging*," he grins, "where the player controlled a little mouse putting letters into sequence in order to form a program. That sold really well." Rather more problematic was the re-release of *Bedlam*: the artwork for the cover bore more than a striking resemblance to a certain heavy metal band's iconic mascot. "I can't remember who designed the *Bedlam* cover," says Mike, "but when the game was released we got a letter from Iron Maiden's lawyers almost immediately because basically the artist had copied Eddie!" *Bedlam* was swiftly withdrawn from sale and the cassette inlay replaced with a distinctly non zombie-like image.

In addition to Steve Hughes, Lothlorien was also using other independent programmers, taking its submitted games and paying royalties to publish them under its brand. *Grid Patrol* was a grid-based shooter from Simon Cobb (who joined MC Lothlorien full-time as a coder); *Hyperblaster*, an *Asteroids* clone by Matthew Rhodes and *The Stolen Lamp* an obligatory text adventure; in addition, of course, to further wargames with American Civil War simulation *Johnny Reb* proving the most popular (Roger Lees was a particular fan of this era). And with its name becoming established, Lothlorien began to focus once more on the strategy genre, receiving a high quota of efforts from third parties. As 1985 dawned, Roger and Mike felt that, while they were selling some excellent games, they weren't doing them full justice. "We were looking at marketing and circulation because we were having a lot of difficulty breaking into the shops," recalls Mike. "We were looking for more volume and also a means of financing further development because we didn't have a lot of money and needed to become more capital-intensive." By now Lothlorien had a team of programmers including Dave Selwood, Peter Carmpouloni and Steve Cobb, in addition to freelancers such as Steve Hughes and Roger Womack.

As a smartly dressed secretary refreshes our coffee cups, Mike leans back and reflects on a year when Lothlorien really began to open up its ambitions. "We entered into an agreement with Argus Press in London," he says, "where they took care of the marketing and distribution for some of our new games." The first game under the new arrangement was *The Bulge*, written by David Bolton of Choice Software. David recalls: "I'd done an arcade game on the C64 called *Buzzby*, but my passion was in wargames having played tabletop and board games by Avalon Hill and Strategy & Tactics since I was 13." With its colourful display, fast gameplay (for a wargame) and user-friendly interface, *The Bulge* was an instant hit and a superb start to the



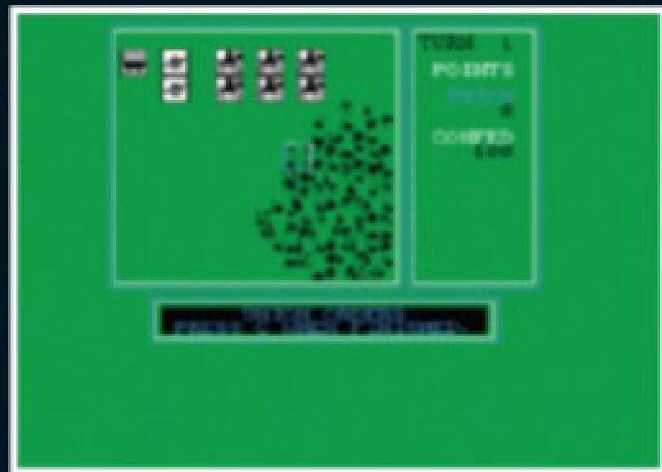
» [ZX Spectrum] *Dead In Russia 1941* was another deep strategy game.



» Mike kept various news clippings over the years.

DEFINING GAMES

Johnny Reb 2



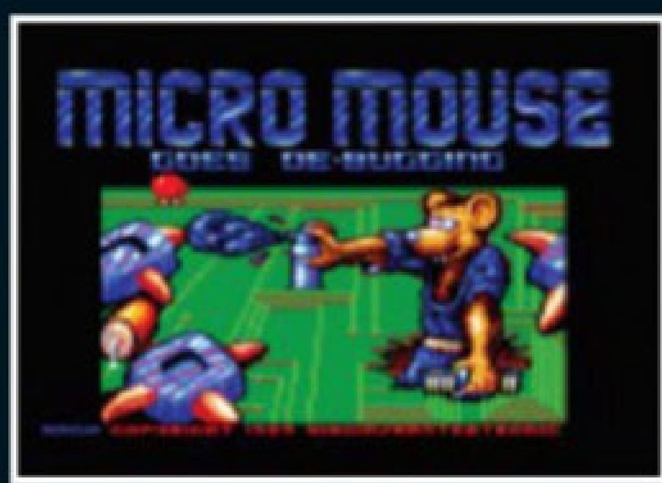
MC Lothlorien had already had a consistent seller with *Johnny Reb* in 1984. From an original idea by Mike Cohen and Roger Lees (who was a huge American civil war fan), it was released on various platforms to reasonable success. When it was suggested they create a sequel, Choice Software, or rather David Bolton, was given the task of updating the first game.

Tyrant Of Athens



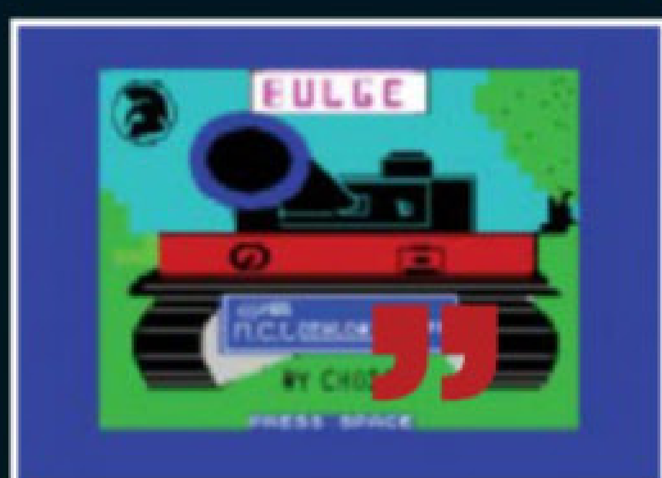
Starting life as a ZX81 game written by Mike Cohen, *Tyrant Of Athens* was a mainly text game that saw the player take on the role of the eponymous ruler of the ancient Greek city. Set in the 5th Century BCE, it was your duty to fend of rival cities, in addition to the nefarious Persian Empire, and ultimately turn Athens into the most feared state in Greece.

Micro Mouse Goes Debugging



By 1983, Roger and Mike were well aware they needed to expand Lothlorien's range of genres if it was to succeed. *Micro Mouse* was an original idea from Mike Cohen where the titular mouse would need to crawl into his computer to rid it of an unpleasant virus. *Micro Mouse* was a fun, if limited game that marked the beginning of Lothlorien's arcade series.

The Bulge

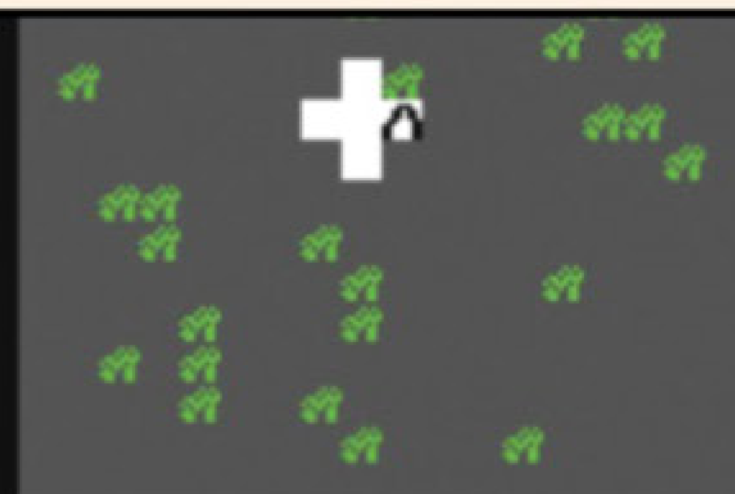


David Bolton's first game for MC Lothlorien was also the first in its partnership with Argus Press. Released in 1985, *The Bulge* (or *Battle Of The Bulge* as it was also known) was based around the pivotal moment in World War Two when the Allies successfully fought off a desperate and last-ditch German counter attack.

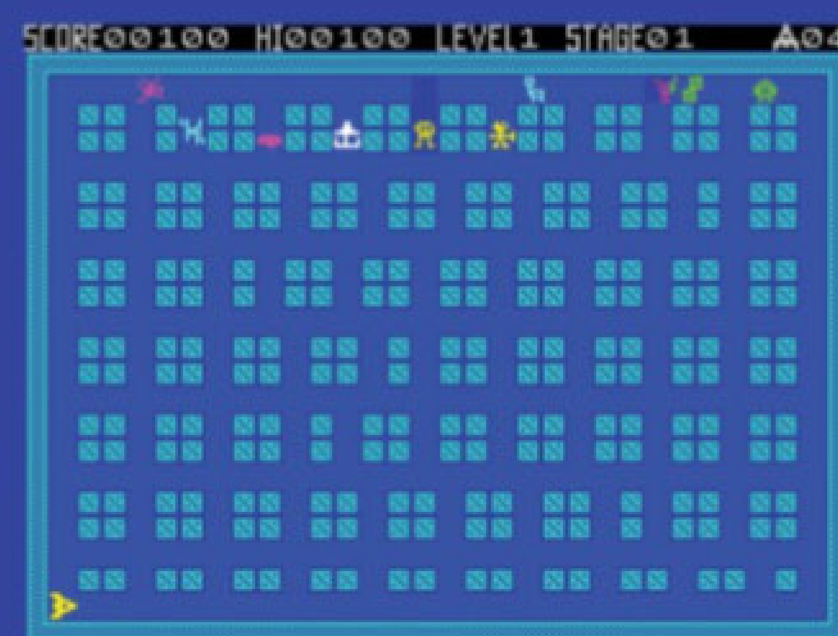
Waterloo



Lothlorien didn't confine its wargames to just ancient and modern history, and *Waterloo* simulated the battlefields of Belgium in 1815. The first impression of *Waterloo* was the hugely improved packaging that Lothlorien had forked out for, partly justifying its £9.95 price tag. Factors such as terrain, morale and some clever AI made *Waterloo* an intriguing game.



» [C64] Lothlorien didn't have a huge output on the Commodore 64, despite moderate successes such as *Special Ops*.



» [ZX Spectrum] *Bedlam* was a simple but strangely satisfying maze shooter from Steve Hughes.



Argus-Lothlorien relationship. "It was probably a bit too difficult," admits David, "but it was a real-time game with loads of units and lots of fun to write." The coder would meet Roger and Mike in 1986, when he produced his second game for them, *Johnny Reb 2*, which secured favourable reviews. "I didn't study the original or even play it," he says, "but had been playing tabletop American civil war games since I was 13. So I just devised a scenario and had fun programming it. The AI for the units to form up and cross the river was interesting – all in Z80 assembler!"

We return to the wood-panelled room and Mike. Despite the early success of *The Bulge*, he declares not much came of the Argus relationship, except when they were pointed in the direction of an acquisition opportunity. Nearby, fellow software house and publisher of the legendary *Chuckie Egg*, A'n'F, had recently gone into liquidation. "We went to the liquidators, paid off what we needed to and took over the rights to their games," explains Mike. "We also took on some of its staff and Doug Anderson joined us. He was a great guy and a great programmer." Lothlorien bought new premises in Prestwich to accommodate staff from both companies and promoted A'n'F's Doug Anderson and Martin Hickling to director status. After a brief period as Starsoft, Icon Design was created in 1986 as a new venture combining the talents of MC Lothlorien and A'n'F. As was common with many smaller publishers of the era, Icon Design became principally a developer rather than publisher, coding games mainly for budget producer Mastertronic (such as the Spectrum conversions of *Kikstart 2* and *Ninja*) and other companies such as Ocean (*Rastan*) and Grandslam (*Peter Shilton's Handball Maradona*). Icon Design expanded rapidly – too rapidly admits Mike – with further offices opening in St Helens and Ardwick. Mike recalls the relationship with Mastertronic in particular with fondness. "I went out to lunch one day with Frank Herman [Mastertronic boss, and one of its founders] and discovered we had quite a lot in common. We were both from Jewish backgrounds and I made some dodgy comment wondering about whether we were related. I told Frank I'd had an uncle who had been a general in the Chinese army and he said 'that's funny so did I!' We never discovered precisely what the link was…"

Sadly, Icon Design/Lothlorien began to struggle towards the end of the decade. Unable to afford the lucrative film and arcade licences that had become common, and lacking the expertise and knowledge to compete in the new 16-bit market, work from Mastertronic dried up as it focused on its new Sega deal. "We'd looked at diversification and in some ways maybe we were naive," says Mike, shifting uncomfortably in his seat. "I'm not sure there's much we could have done differently or better, except perhaps have more technical staff earlier than we did." A more significant issue for Lothlorien was the way in which its strategy games sold compared to other genres. "We never had any particularly 'big' hits, but the sales would continue for some time. After all, it was a niche market so if someone wanted to play a computer version of *Waterloo* for instance, there wasn't a lot of choice." In the end Mike and Roger attempted to make the closure of Icon Design as painless as possible for its employees. "I think we had regrets about the way it finished," he adds, "and it was very stressful at the end as we were responsible for a lot of people's incomes. But we had some good fun and I believe we did achieve something and most of the people who worked for us went on to make a success of themselves. And I don't think you can have a much greater legacy than that." ✱

Our thanks to Mike Cohen, Steve Hughes, David Bolton, Roger Womack and Steve Riding.

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ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS

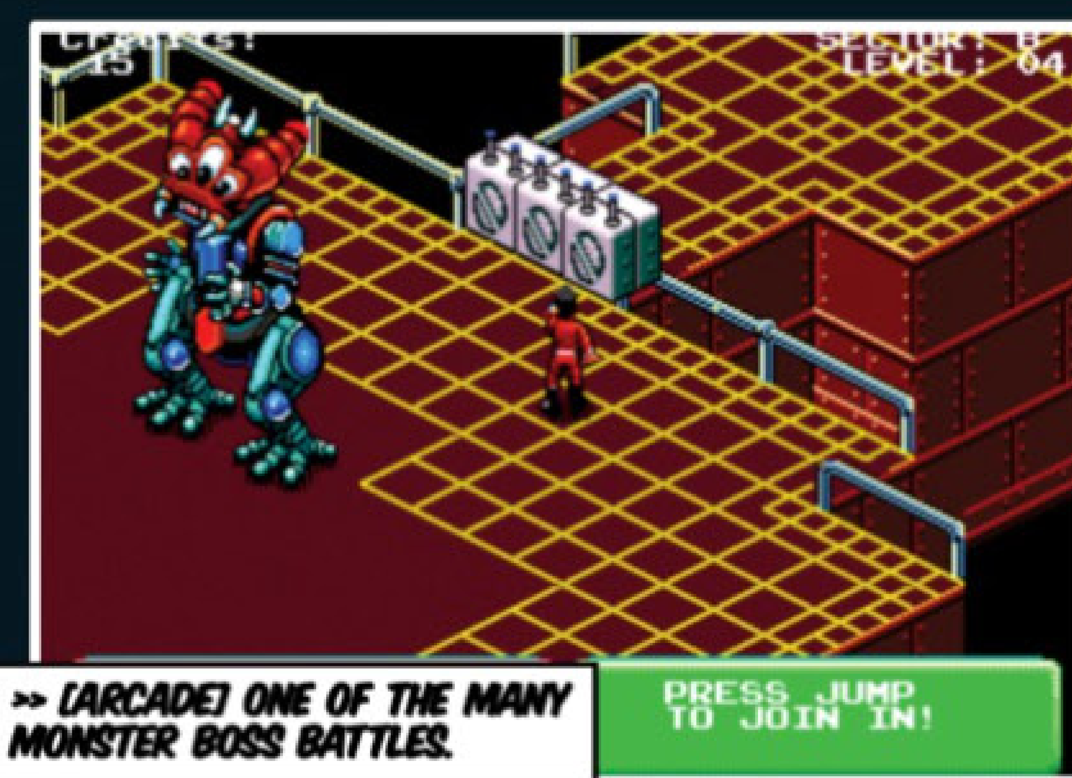
When it comes to arcade games no company has come up with more innovations and crazy ideas than Atari. Kieren Hawken takes a trip to the planet of the robot monsters



>> [ARCADE] THE GAME GIVES YOU SOME HANDY TIPS TO HELP YOUR SURVIVAL.



>> [ARCADE] SURROUNDED BY DEADLY DRONES.



>> [ARCADE] ONE OF THE MANY MONSTER BOSS BATTLES.



>> [PC] SUPERB CUTSCENES CAPTURED THE ESSENCE OF CLASSIC SCI-FI FLICKS.

The plot of *Escape From The Planet Of The Robot Monsters* (or *Robot Monsters* as we will now call it) is very much inspired by the sci-fi B-movies of the Fifties. In fact the whole look and feel of the game right down to the design of the arcade cabinet follows this theme. According to the game's intro sequence you are stranded on the originally named Planet X, a synthetic industrial planetoid whose most notable feature is a top-secret research laboratory. This is run by buxom brainy beauty Dr Sarah Bellum, who has become trapped there after the invasion of some evil aliens known as the Reptilons. After capturing the good doctor they force her to create a robot army to take over the Earth and rid the universe of the humanoid scum! By now these alien invaders should know that we don't go down without a fight, cue our brave heroes – the manly named Jake and Duke. They are the crème de la crème of the Space Corps and the future of the human race is in their hands!

Dave Akers was the man tasked by Atari Games to bring this videogame B-movie to life and he clearly remembers how he got started in the industry. "I studied Electrical Engineering in college, but took a lot of programming courses. After graduation, I got a job in aerospace, but I enjoyed playing videogames in my spare time. I remember reading the first issue of *Electronic Games* magazine and realising that some people were actually making a living at developing games and thought why couldn't I do that?" So all he had to do now was get a break and find employment. "I was living in the Los Angeles area at the time and thought I would have to move to Silicon Valley to work at a games company. But then Mattel Electronics started advertising for game programmers for their Intellivision console. Mattel's headquarters was about a mile from where I was currently working. So I applied for a job there and it was accepted! For two years I worked on Atari 2600 games at Mattel." But the bubble soon burst when the great videogame crash took hold on the North American market and Dave believed his dreams had come to an end. "When the game market crashed in America and Mattel Electronics closed down I got a job working for a graphics start-up company in Portland Oregon. They did graphics software for IBM PC's and compatibles. Unfortunately, like most start-up companies, the company was never more than modestly successful." Not one to give up on his dreams he kept the faith that one day something else would come along, and eventually it did: "Four years later a headhunter called me and asked if I wanted to work at a videogame company," Dave explains. "I told him straight that I wanted to work at Atari Games. I was a big fan of their arcade games – titles like *Marble Madness*, *Gauntlet*, *Roadblasters*, *XYbots* etc were big favourites of mine. Fortunately, Atari Games was looking for programmers and they promptly hired me!" And so Dave proved that you should never give up faith, as his dream job just fell into his lap.

Atari Games really was the place to be for any arcade videogame programmer in the Eighties and Nineties. The company fostered an attitude of creativity and let people run wild with their ideas. Upon arrival at the legendary company Dave was blown away by what he saw. "When I got to Atari Games, the developers of games such games as *Asteroids*, *Missile Command*, *Tempest*, *I, Robot* and *Star Wars* were all still there! *Hard Drivin'* and *Cyberball* were being worked on and it was great to be able to work with such talented people!" At the time of his arrival at the company (summer 1988), *Robot Monsters* had been in progress for about a year. There were two core (full-time) team members – Mark Stephen Pierce, who was a combination of producer, game designer and artist alongside Bonnie Smithson, the main programmer. As well as a bunch of other people assisting with the project in areas such as sound, hardware and testing. When Dave was first shown the project it seemed to be up and working. "This game is almost done! What do they need me for?" he quizzed, but all was not what it seemed. "It turned out that this one level had been created by working out the details on graph paper and typing the numbers that described the level into the computer by hand," he explains, adding some more insight, "this was a fine way to create a test level, but a very tedious way to try and develop all the levels."



>> THE HOME CONVERSIONS OF THE GAME KEPT THE SAME COMIC BOOK STYLE ARTWORK FROM THE ARCADE GAME.



DEVELOPER HIGHLIGHTS

BUMP 'N' JUMP
SYSTEM: ATARI 2600
YEAR: 1983

KLAX (PICTURED)
SYSTEM: ARCADE
YEAR: 1989

BURGER TIME
SYSTEM: ATARI 2600
YEAR: 1983



>> [ARCADE] HERE IS YOUR MISSION IF YOU CHOOSE TO ACCEPT IT!



>> [ARCADE] IF YOU FALL OFF THE EDGE OUR HERO HANGS ON FOR DEAR LIFE TO GIVE YOU A CHANCE TO SAVE HIM.



>> [ARCADE] THE CYBERSLED BONUS STAGE INVOLVES YOU TRYING TO ESCAPE THE MAZE.

HOMEBREW MONSTERS

Dave Akers explains why he still enjoys making games for older systems

It's not very often a professional programmer returns to their roots, but that is exactly what Dave Akers did last year when he returned to one of the systems where he made his name, the Mattel Intellivision. He has now developed two homebrew games for the system, *Paddle Party* and *Match 5*. Elektronite, a company that still supports the Intellivision with professional quality games, published both of these titles. William Moeller is the owner of Elektronite and told us how he found Dave. "Dave uses the handle 'Catsfolly' on the Atari Age Intellivision programming forum. I knew he was developing *Paddle Party*, so I offered to publish the game and he agreed. After our agreement, I found out that he was working on a 'Color Lines' clone. We changed its name, and I suggested design changes and did the play-testing. It was further along than *Paddle Party* so we focused on completing *Match 5* first." An addictive puzzle game that harks back to his biggest success, *Klax*, *Match 5* was chosen as one of the Top Ten Games of 2013 by Classic Game Room, coming in right behind the latest *Assassin's Creed* game! *Paddle Party* contains five incredibly fun mini-games that will all be very familiar to owners of the early *Pong* consoles. Both games can still be purchased, complete with a full colour, manual and overlay from the Elektronite website.







In another part of the building key programmer Dennis Harper had recently finished the wacky river racing game *Toobin'* and he soon became involved in the project too, as Dave tells us. "For this game he (Dennis) had written a level editor that ran on the arcade development hardware. Using this level editor, he could create a new level using the arcade game controls and then instantly play it and try it out. He could go back and forth over and over between editing and playing until he was happy with the level, and then he could upload it to the main computer to be included in the game." What you have to remember was that at this point in time programmers did not have what we know as modern day PCs. Programs were created and compiled on terminals connected to a central computer, such as the Vax. The compiled program was then downloaded to an arcade machine that had some extra buttons such as freeze and single frame step. It also included an expensive box called an ICE (In Circuit Emulator) for debugging the game. Dave then goes on to explain in more detail Dennis's involvement. "Mark (Stephen Pierce) wanted this editing capability for *Robot Monsters*. There was a meeting just before I got there and it was decided that rather than Bonnie writing an editor like Dennis's from scratch, it would better to rewrite *Robot Monsters* to match the internal structure of *Toobin'*, then Dennis's editor could be adapted to *Escape*. So, for my first few months at Atari Games, Bonnie and I worked at tearing apart the *Escape* code and rewriting it to work like *Toobin'*. After months of work, we had a game that looked almost exactly like it looked when I first saw it – but now it incorporated the level editing code and Mark was able to quickly create the other levels for the game." Dave's contribution cannot be underestimated here – without his intervention and coding knowledge it is very likely that the project would have just been canned, as in its current state it was just too ambitious for all of the people involved.

For the look of the game Atari had taken inspiration from a couple of its previous hits, *Paperboy* and *Marble Madness*, by employing an isometric viewpoint. The key gameplay elements were not actually that original; at heart it was an arcade adventure with shoot-'em-up elements. Your mission was to explore the planet, rescue the humans, shoot the robots and defeat the alien invaders. It was the way the game was portrayed and a few unique design features that made it really stand out



IN THE KNOW

- » **PUBLISHER:** ATARI GAMES (ARCADE) DOMARK/ TENGEN (HOME)
- » **DEVELOPER:** DAVE AKERS, BONNIE SMITHSON, MARK STEPHEN PIERCE
- » **RELEASED:** 1989
- » **PLATFORM:** ARCADE
- » **GENRE:** ACTION



>> [ARCADE] BEWARE! THE EVIL LOLLIPOP MONSTER IS WAITING!

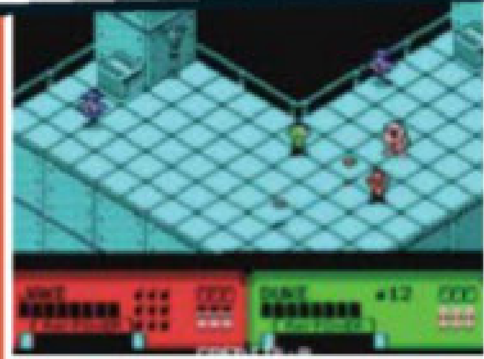
CONVERSION CAPERS

The best and worst of Domark's various home ports



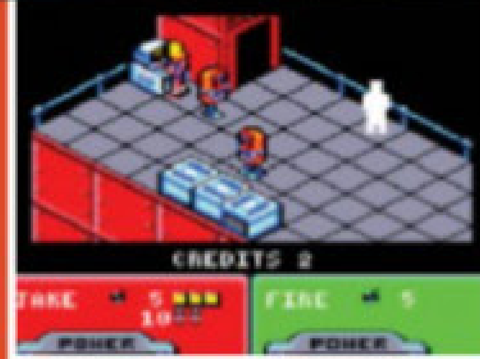
ZX SPECTRUM

■ The Speccy version of *Robot Monsters* lacks the colour of the others but the monochrome visuals actually have a lot of detail and work quite well. There is also some fantastic AY music for lucky Speccy 128K owners. Everything moves at a brisk pace, even in the two-player mode, and the controls work well once you get used to them.



COMMODORE 64

■ The C64 version is definitely the worst of the home conversions with it's tiny and badly defined sprites, poor choice of colours and the strange and rather off-putting scrolling routine that means the screen keeps moving even when you have stopped! The one redeeming feature here is the excellent SID music throughout.



AMSTRAD CPC

■ Of the original 8-bit ports the Amstrad version is probably the most impressive. Although it has a small play window it's in full colour and looks incredibly close to the arcade game. That said, it's a bit slower than the other versions, especially in two-player, and doesn't feature any music, going for noisy sound effects instead.



ATARI ST

■ The one appearance of the Atari arcade game on an Atari home machine, the ST pulls off a fantastic conversion of *Robot Monsters*. It looks almost identical to its coin-op parent and features some seriously good YM music too. The only thing that lets it down slightly is the push scrolling, but it's still a relatively minor compromise overall.



SAM COUPÉ

■ One of the few commercial releases to appear on the Sam Coupé, this conversion of the game doesn't start off well when you see all the intro screens were re-used from the Speccy version (colour clash included!). But things really look up when you get into the game and see the graphics from the ST version with some excellent sound.



COMMODORE AMIGA

■ *Robot Monsters* on the Amiga is pretty much identical to the Atari ST version, right down to the dodgy scrolling! The only real difference is in the sound department and for once the Amiga loses out here with some pretty rough music that is no where near as nice as its 16-bit rivals'. It's still a solid conversion however.

from the other coin-ops of the time. The first of these was the control method that gave your character 360-degree movement and allowed you to rotate and shoot at the same time. This was not as easy to implement as some might think and caused huge problems with the home conversions of the game. "The isometric point of view meant that characters in the game moved in eight different angles, so everything had to be animated at five different angles," Dave explains. "The sprites could be flipped to provide the other three angles but this took up a lot of graphics memory." The game also required you to find and activate switches in order to progress through each level. This initially caused some problems as Dave explains. "At one point management had put a lot of pressure on us to put the game out in an arcade and see how people reacted to it. We said the game wasn't ready yet, but they insisted, so one night Mark and I drove the game out to an arcade and set it up. At that time the player had to pick up a key to unlock the escalator. But the first person to try the game in the arcade picked up the key and then their character died before they could do this. When the character reappeared, the key was gone, the player didn't have the key and the stairs were still locked!" The player was pretty miffed, and Dave could definitely sympathise. Unfortunately, there was nothing he could do. "We were totally embarrassed. We refunded his money and went back to the lab to fix the software. Later, marketing told us that keys were overused in videogames! So we replaced the keys with the big power switches, which we felt fitted the game's theme better anyway."

The game was moderately successful for Atari and was soon picked up for home conversion by Domark as part of the Tengen label. Sadly no console ports were ever released but the game was planned for Atari's own Lynx handheld. A big part of its appeal was the elements of humour that had been added by the programmers and picked up by audiences. "In the game there are slaves chained to the consoles, working. If your character touches them, they are transported to freedom and you get points. But if you shoot them before you touch them, they change to a fried appearance, and you don't get the points when you rescue them. But when we were testing *Robot Monsters* in the arcades, some players, if they accidentally shot one of slaves, would angrily exclaim 'stupid slave!'. They blamed the slave for getting shot, rather than their own carelessness!" Dave himself is still really pleased how well the game turned out and how it is fondly remembered by videogame fans. "I think the game turned out pretty well. The vision, as I saw it, was to make a fun two-player isometric view *Gauntlet*-type game with a Fifties retro science-fiction theme, and I think we accomplished that." *

Special thanks to: Dave Akers and William Moeller for their help with this feature.

"We replaced the keys with the big power switches, which we felt fitted the game's theme better"

Dave Akers



>> [ARCADE] THE PORT-O-MATIC IS AN EXIT THAT TAKES YOU TO THE NEXT LEVEL.

>> THE ARCADE GAME FLYERS WERE PRODUCED TO LOOK LIKE COMIC BOOKS.

>> [ARCADE] OUCH! THAT CAN'T BE GOOD FOR YOUR INTERNAL ORGANS!



In the chair with...

RJ MICAL

From the arcades to the 3DO via the Amiga and Lynx, RJ Mical is a celebrated figure in the hardware and software business. He tells Paul Drury about three decades of making stuff people want to play with

Whether he's producing great games, coding intuitive operating systems, designing groundbreaking hardware or writing novels, RJ Mical is happiest when he's being creative. At the age of 14, he built a bespoke Tic-Tac-Toe machine from bulbs and relay switches, which played a mean game of noughts and crosses and drained batteries for fun. After graduating from the University of Illinois, he joined Williams and contributed to some of its memorable arcade coin-ops before becoming a key player in the development of the Amiga computer. He was co-designer of not one but two prescient consoles in the shape of the Lynx and the 3DO and currently has his game face on at Google. He also enjoys paragliding, travelling to exotic lands and coming up with bizarre brain teasers. We suspect the 'R' in RJ stands for 'Renaissance Man'…



» [Arcade] Beware, it lives!

Since 2008, you've circulated a weekly conundrum called the Monday Morning Tickler. Is creating software and hardware a bit like a brain teasing puzzle?
[laughs] Fascinating! Yes, I send out a little puzzle once a week and I'll happily add any of your readers to the list! I worked out a long time ago that I had a bunch of talents and the best thing to do was to find something that brought them together in endeavours that took advantage of more than one of them. That's why I started doing videogames – I love art, I love music, I love animation and films and games and software and computers… there have always been many pieces that fit together into a whole.

You graduated with a degree in Computer Science and English plus a minor in Philosophy. Has that mix of science and the arts helped you during your long career?
Every day it helps me! I learnt to be a good communicator and I was exposed at a young age to some of the fundamental questions we have to ask ourselves. That's helped me as a game designer and a designer of software humans have to use. I was especially interested in metaphysics, the rules about the rules, which is fascinating for a game designer. And when I start designing software, I write it out as a short story first and then fill in the code so it does what the narrative says it should.

You joined Williams in 1983. What do you think it saw in you back then?
The only guy there that saw a flicker in me and decided to give me a chance was Noah Falstein. He and I have remained friends ever since and have worked on many projects together over the years, including right now at Google!

Your first project with Noah was *Sinistar*. What was your role on that game?
It was well underway by the time I joined the team but what they didn't have was the pizzazz! The core game was done but I got to do the explosions, the special effects and all the cool stuff.

***Sinistar* is famous for its speech. Do people still come up to you and bellow 'Beware I Live' and 'Run Coward!' from the game?**
All the time! [laughs]

You then coordinated the *Star Rider* project, Williams's first and only laserdisc game.
Star Rider was quite an undertaking. We had these wonderful design sessions where we'd challenge ourselves to think of alternate ways to think about games and game hardware. We tried to dream big and come up with industry changing ideas. Laserdiscs were very expensive and the cabinets had to be really well built to withstand the shaking customers gave them and not let the laserdisc skip. It was a real feat of engineering but in the end I found the game was boring. You were just rolling through a movie and I didn't think there was enough excitement in there.

It's a very surreal game, like *Easy Rider* after they've taken the acid. Did you want to create something of a 'trip' with *Star Rider*?
[laughs] Yes and no! We didn't sit down and say 'let's create something really trippy' but yes, a lot of my contemporaries had had those experiences. It was part of our culture. And at Williams, there was a lot of partying, when no one was looking, out in the parking lot. It was a pretty loose crowd. There was a certain *Yellow Submarine* quality to that game.

It was just 'your contemporaries' partying then, not you?
I thought I managed to dodge that one! I'm not unknown for experimentation. Let's leave it at that.

What prompted you to leave Williams in 1984 and join the fledgling Amiga project?
There was a healthy amount of networking once the Amiga project got underway and they invited me to join them but I blew them off… twice! It was a bit too weird for me, a bit too outside the experiences I'd had. I was a kid, just starting in the industry and I had a good job that I enjoyed at Williams. This was a start-up in California and they wanted me to relocate and leave behind my family and friends in Chicago. It was scary. I ditched the first two times I was invited to see them.

Why did you turn up the third time they invited you over?
Noah [Falstein] dropped a videogame on my leg! Noah, me and a guy called Rich were co-owners of the coin-op *Red Baron*, an awesome game. We were trying to move it one day and it fell off the dolly we were transporting it on. It was going to crash but rather

> "At Williams, there was a lot of partying out in the parking lot when no one was looking"

SELECTED TIMELINE

GAMES

- **SINISTAR** [ARCADE] 1982
- **STAR RIDER** [ARCADE] 1983
- **DEFENDER OF THE CROWN**[VARIOUS] 1986
- **ELECTROCOP** [LYNX] 1989
- **CALIFORNIA GAMES** [VARIOUS] 1989
- **BLUE LIGHTNING** [LYNX] 1989
- **GATES OF ZENDOCON** [LYNX] 1989
- **ESCAPE FROM MONSTER MANOR** [3DO] 1993
- **TWISTED: THE GAME SHOWZ** [3DO] 1993

HARDWARE

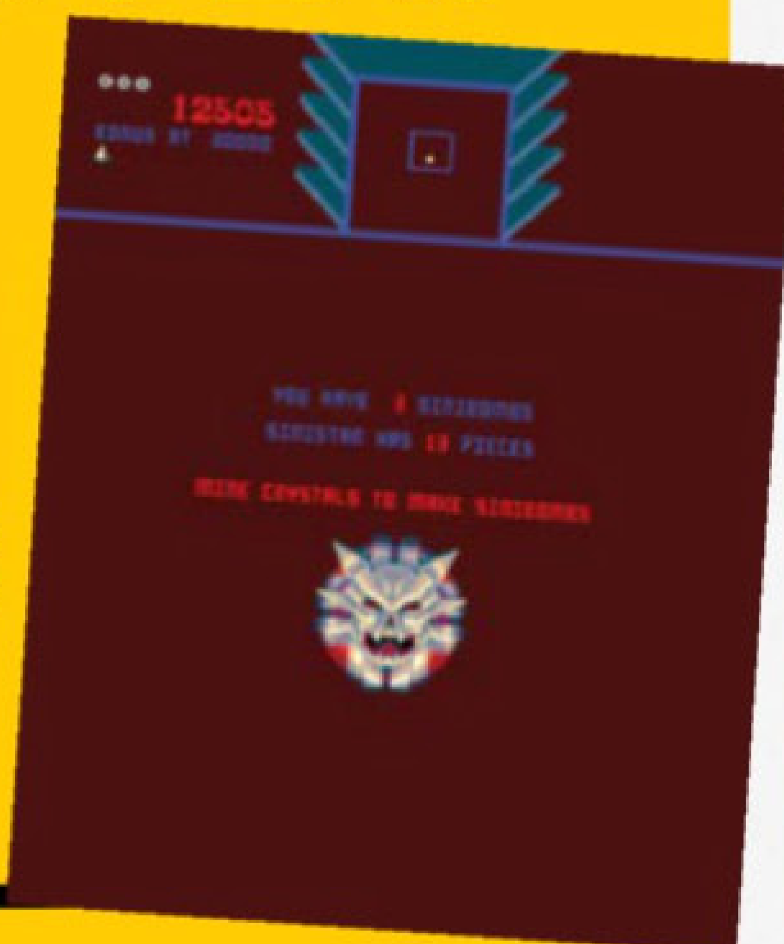
- **AMIGA** 1985
- **LYNX** 1989
- **3DO** 1993





FIVE TO PLAY

Five great games that RJ had a hand in



SINISTAR

■ RJ's videogame debut was this impressive, cackling shooter, with its memorable speech and merciless desire to crush and consume your tiny ship. Set in hostile deep space, you must mine crystals from asteroids, which become valuable 'sinibombs', whilst fighting off the immediate threat of enemy warrior ships. Meanwhile, a dedicated fleet of workers construct the ominous *Sinistar*, a giant, hungry mothership, which on completion, pursues you with a roar and the sneering taunt of 'Run Coward!' The development of *Sinistar* was a difficult and convoluted one (see our Making Of in **RG** 125) but RJ helped add the 'pizzazz' that makes it a fine addition to Williams's roster.

STAR RIDER



■ We know we're being churlish suggesting this is 'one to play'. The unreliability of laserdisc coin-ops and the limited release of Williams's only entrant into the genre makes it unlikely you'll find a *Star Rider* in the wild (though we do know there's an original sit-down machine awaiting restoration in Funspot arcade's workshop). Emulation is also a challenge given the esoteric technology and besides, a big part of the experience was clambering onto the futuristic cycle in an Eighties arcade and imagining you were riding off into a surreal digital sunset. However, we urge you to at least watch a playthrough on YouTube or the like.

DEFENDER OF THE CROWN



■ RJ's key role in developing the Amiga computer meant he was in a perfect position to become a consultant to software developers as the machine found its feet in the mid-Eighties. He lent his skills and insider knowledge to many titles but his work on *Defender Of The Crown* was particularly crucial. When development hit trouble, he stepped in to help bring it to launch and it remains one of the defining releases of the Amiga's early years. Its tale of the Norman-Saxon power struggle for Medieval England was a showcase for the capabilities of the new machine and it established Cinemaware as a major creative force. Anyone for jousting?

ELECTROCOP



■ RJ had a hand in all six of the Lynx's launch titles but was most involved with this attempt to bring a 3D maze game to the handheld. *Electrocop* has your heavily-armed law enforcer bounding through a fortress in search of the President's daughter, kidnapped by the imaginatively named Criminal Brain. Blasting the diminutive robot Walkers that patrol the corridors is satisfying and logging into a terminal to access some simple mini-games, including a rather sedate version of *Breakout* and a more rounded stab at *Asteroids*, is mildly distracting, though the game would benefit from more variety. However, it's a nice example of the console's potential and needs to be played.

TWISTED: THE GAME SHOW



■ Of all the 3DO games RJ was involved with, his biggest contribution was to *Escape From Monster Manor*, which he describes as "a B-title, not a strong player but a little 3DO miracle". It was an interesting attempt to create a distinctive first-person shooter for the new console but given the proliferation of the genre since then, it hasn't aged particularly well. *Twisted*, on the other hand, remains a marvellously oddball release and one that genuinely tried to utilise the machine's multi-media features. This collection of mini-games, ranging from simple slide puzzles to aural memory tests and trivia questions, is dressed up as a bizarre gameshow, complete with suitably deranged contestants and a manic host.



than let that happen, I threw myself underneath it. I damaged my knee but I saved that videogame!

Erm, good catch but how does that lead to you joining Amiga?

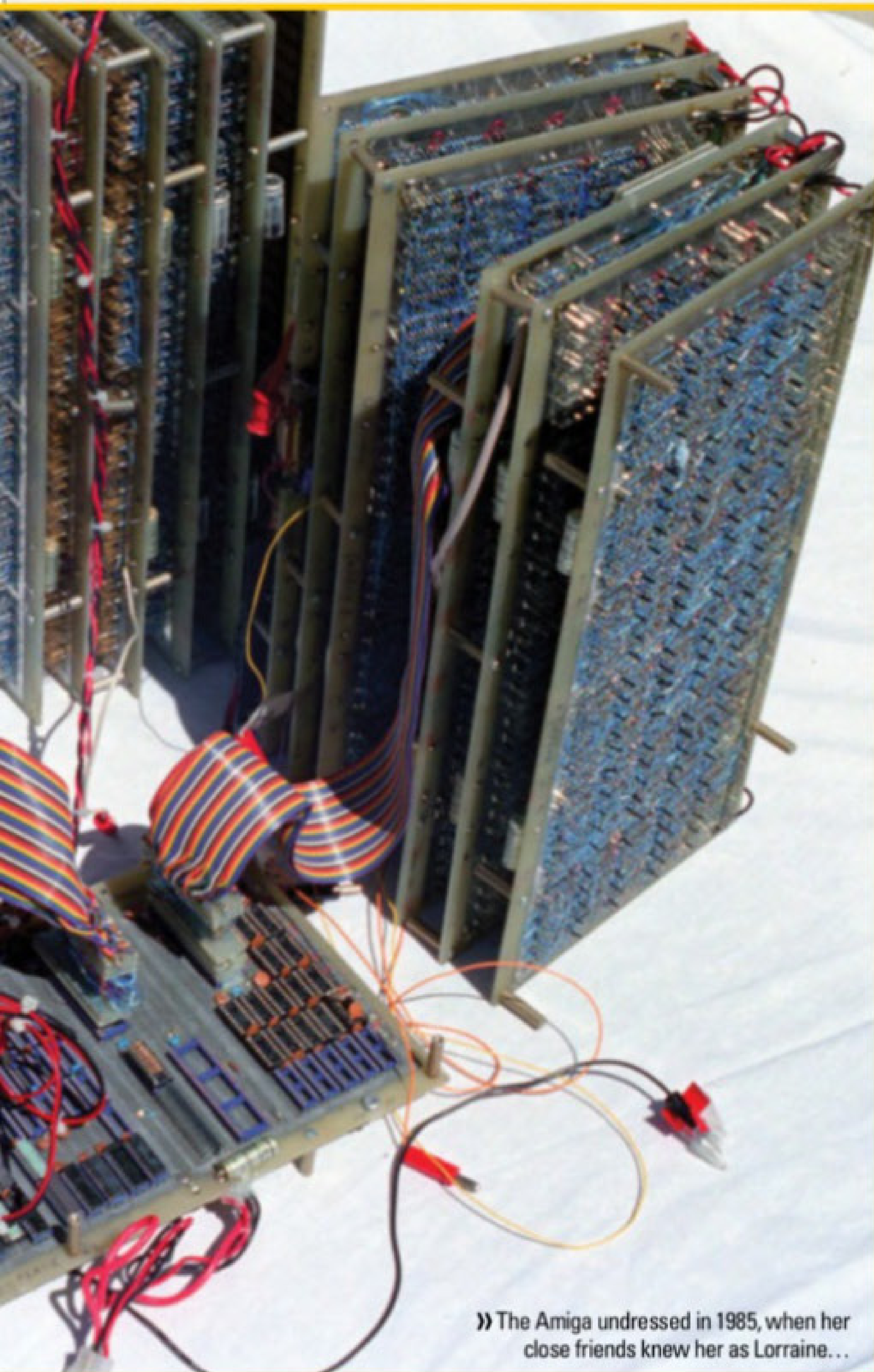
I was laid up because of my knee and couldn't join my friends on a trip we'd planned so instead I accepted this invite from Amiga. It was just something to do while my friends were away. I went to California on Amiga's dime, hobbled around their offices on crutches and interviewed there. It was love at first sight! I couldn't believe my good fortune that those guys were offering me the opportunity to be part of it. I said yes right then and there.

How far along was the Amiga project when you eventually arrived?

I was one of their first engineers. There was nothing but ideas and mechanical drawings when I got there. I don't think they'd even started laying out the silicon at that stage. The building was largely empty when I arrived and over the next year, we watched that baby fill up. We ended up jamming ten people into our poor little software lab. It was truly a wonderful little start-up environment. We had that good mental spirit and everyone was pulling at the same rope. I often miss that camaraderie.

You are famous for your work on Intuition, the Amiga's operating system. Were you motivated by a desire to make computing more accessible to ordinary people through a friendlier interface?

Me and the others at the company were used to having access to computer power but our moms and brothers and sisters weren't yet. We wanted to make a personal computer that had all this great power, these colours, this great sound, at a price that anyone could afford and with a user interface that was accessible to my mom! I often used her as my mental model when I was designing Intuition. We called it that on purpose. It was easy to understand and you


The Amiga undressed in 1985, when her close friends knew her as Lorraine…

didn't need to be a rocket scientist and remember 8,000 keys to use it.

It sounds like you really wanted to make a 'people's computer' that everyone could use, not just the IT-literate elite.
It's a far more cynical time now and it's hard to imagine a bunch of kids getting together and saying they're going to build a new computer. We were young and naïve but ambitious and the philosophy of the thing was as noble as you describe for many of us. We were trying to change the world! We were convinced what we were doing was the right thing for humanity, for civilisation.

The Amiga was undoubtedly a great success. Why do you think it did so well?
I think we hit the demographic we were aiming for. I got a letter the other day from a guy I'd never met who wanted to thank someone for the Amiga computer. It had changed his life. He'd had this moment of revelation and instead of doing what he had expected to do, he saw the power of the Amiga and had this desire to do computer graphics. He's now a well-established figure in the industry and he said it was the exact moment when he saw the Amiga that changed who he would become in life. It's stuff like that. Bringing that joy… we reached the people we wanted to and changed lives.

What were your thoughts on the Atari ST, usually seen as the Amiga's main competition?
The ST Amiga rivalry was something that existed in the press and shows up a lot in the history books but from our perspective, we didn't feel we were competing with them. We knew the ST engineers and some of them were really good friends. They got a late start compared to us and were up against the calendar. They worked amazingly hard, burning the candle 24 hours a day, and they did a spectacular job. They got a device out that was almost competitive. It was an awesome effort but I never considered it a threat. To me, if felt like a less matured effort. The Amiga's user interface, its display capabilities, the quality of the software that soon became available for it… all these things piled up against the ST.

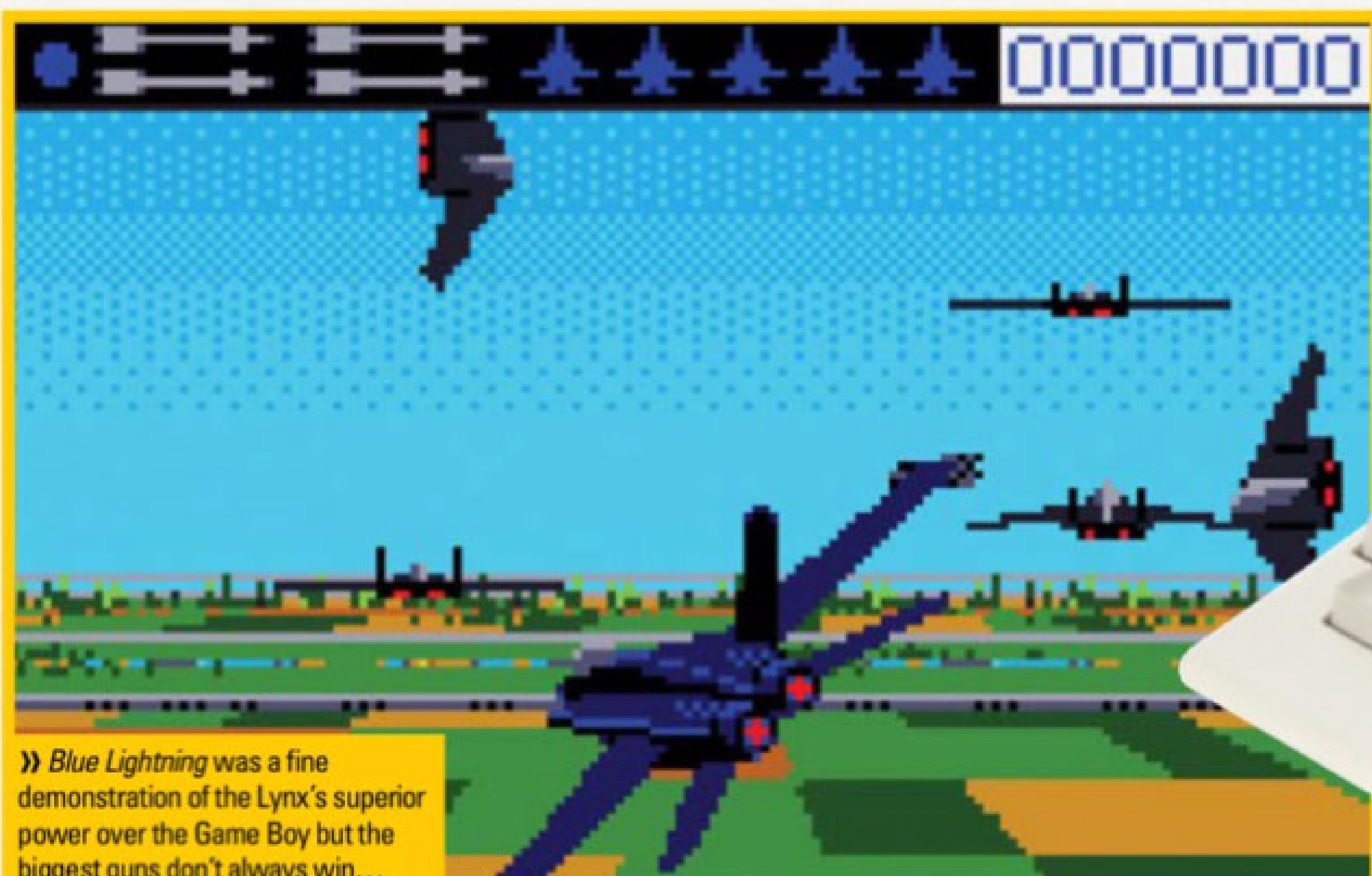
You became Director of Software at Amiga but then left in 1987. Had something changed at the company in your opinion?
I had a long chat with my boss, Dave Morse. He was an amazing person and a great confidant. We talked about what Commodore's acquisition of Amiga would mean and one of the things he said was if I was going to capitalise on the things I had learned at Amiga, I should start my own consulting company. So I did! I was in position to help a lot of people make their Amiga software better because if anyone knew that machine, it was me! I had a lot of fun and worked on a bunch of software.

> “With the Amiga, we were trying to change the world. We were convinced that what we were doing was the right thing for humanity”

One of the games you worked on was *Defender Of The Crown*. Is it true you made Kellyn Beeck slide instructions under your door so he wouldn't disturb you while you coded?
Yeah, there was that one time [laughs]. That game has a chequered past with me, which is why I don't mention it on my resumé. It didn't have the best business outcome. There were some dicey players and I was a new contractor just cutting my teeth. I learned the hard way. I haven't talked to any of those Cinemaware guys since.

Was it around this time that you had the idea for a handheld games console?
Dave Needle, Dave Morse and I decided to create a colour handheld game device and in quintessential Silicon Valley style, we sat at a restaurant and drew the basic block diagram on a napkin. It was Morse's job to find the funding for what would become the Lynx but what he found was Epyx. They had the money and we'd become part of them. We set up a proper business agreement to do it for Epyx rather than on our own. The big attraction was that they had an entire games development staff and they had game IP that we could get on to the Lynx right away. We'd be partners… we'd be brothers!

How do you start planning when developing a new console? Is it 'what would a dream system have' or 'here are our limitations, what can we do within them?'
I guess the answer is we spent the first few months just discussing what could it have. Once we started doing the research and found out the limitations we would encounter, then it became 'what's the best we can do given the constraints?' but that didn't come for quite some time. Like with the backlight – we knew it was a critical feature because we wanted the biggest and brightest display we could. The reality was that the technology we looked at was so expensive. There were viewing angle problems and hotspots from the light, all kinds of things. Then the magical



Blue Lightning was a fine demonstration of the Lynx's superior power over the Game Boy but the biggest guns don't always win…


"The Amiga was a work of love", enthuses RJ. Even Andy Warhol fell for its charms…



day came when a guy found the answer and we realised we could have a gorgeous display!

When Atari got involved, were you pleased to have a big name on board or wary it would compromise your vision for the Lynx?
[sighs] We weren't worried about them compromising the vision but we were concerned about them compromising the company. From our own direct experience and that of our friends, we knew the reputation of some of the players at Atari was substandard. We were worried the Lynx project would get caught up in that. It troubled us and we wished it wasn't happening. We told Epyx if the deal went ahead, we'd walk. They went ahead… so we walked.

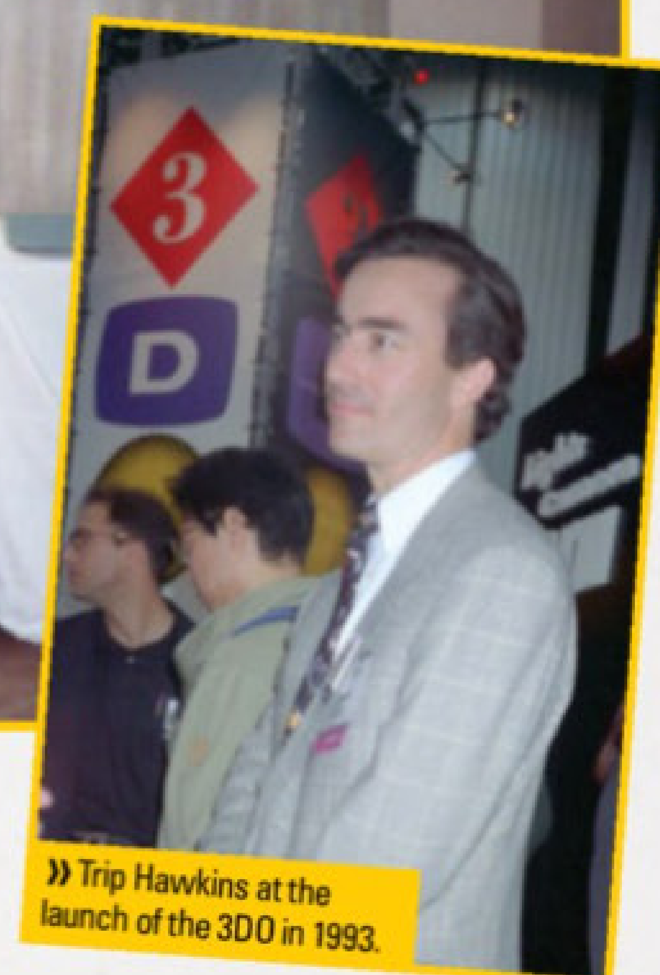
You must have been devastated at leaving behind the machine you'd invented before it was even officially released.
It hit Dave [Needle] harder than me, I think, but we were both frustrated with the outcome. We'd worked hard and inspired a bunch of people to get involved with that wonderful project and to have it end that way… we told everyone what would happen – and then it happened! Some of the people involved with the new ownership of the Lynx had really bad reputations with hardware manufacturers in Asia and with software developers all over the world. Everyone knew about these guys. Suddenly all these sweet deals we'd made for low-cost parts for the Lynx dried up on them. They'd be like, 'We remember you from five years ago. Guess what – the price just doubled!'

So you think if Epyx hadn't gone with Atari, things could've been very different for the Lynx?
I'm not the business head guy but yes, I think if Epyx had found a better path… but they were out of cash. We showed it to Sega and hoped they would buy it instead of them doing what became the Game Gear. If they'd bought the Lynx I think that could've completely changed everything. Even if Epyx had managed to scrape together the money themselves and released it at the price we believed we could hit, which was low, like under a hundred dollars, things could've been very different. Even more important a factor than the price was the software. We had deals with all the major players and we'd worked out a magnificent library of software for the Lynx for when it shipped but after Atari took over, they all said, 'Are you kidding? No f***ing way! We're not taking a risk with you and end up losing again. Pay us for last time first, then we'll talk!' They just stopped developing for it.


» The 3DO prototype, set up at the CES in 1992. Don't trip over the wires, Trip…

Undeterred, you began designing another console, again with Dave Needle and Dave Morse… and again you sketched it out first on a restaurant napkin!
Yup! I believe Needle has the Lynx one, I have the 3DO one.

This was to become the 3DO, another forward-thinking machine. What was your initial vision for the console?
The goal was to put out something low-cost with state of the art hardware, so no other machine could launch in the same window with better graphics or maths capabilities.


» Trip Hawkins at the launch of the 3DO in 1993.

In addition, we wanted it to be the first system to ship with a built-in CD-Rom. The advantage would be the sheer amount of content we would be able to pack into a game.

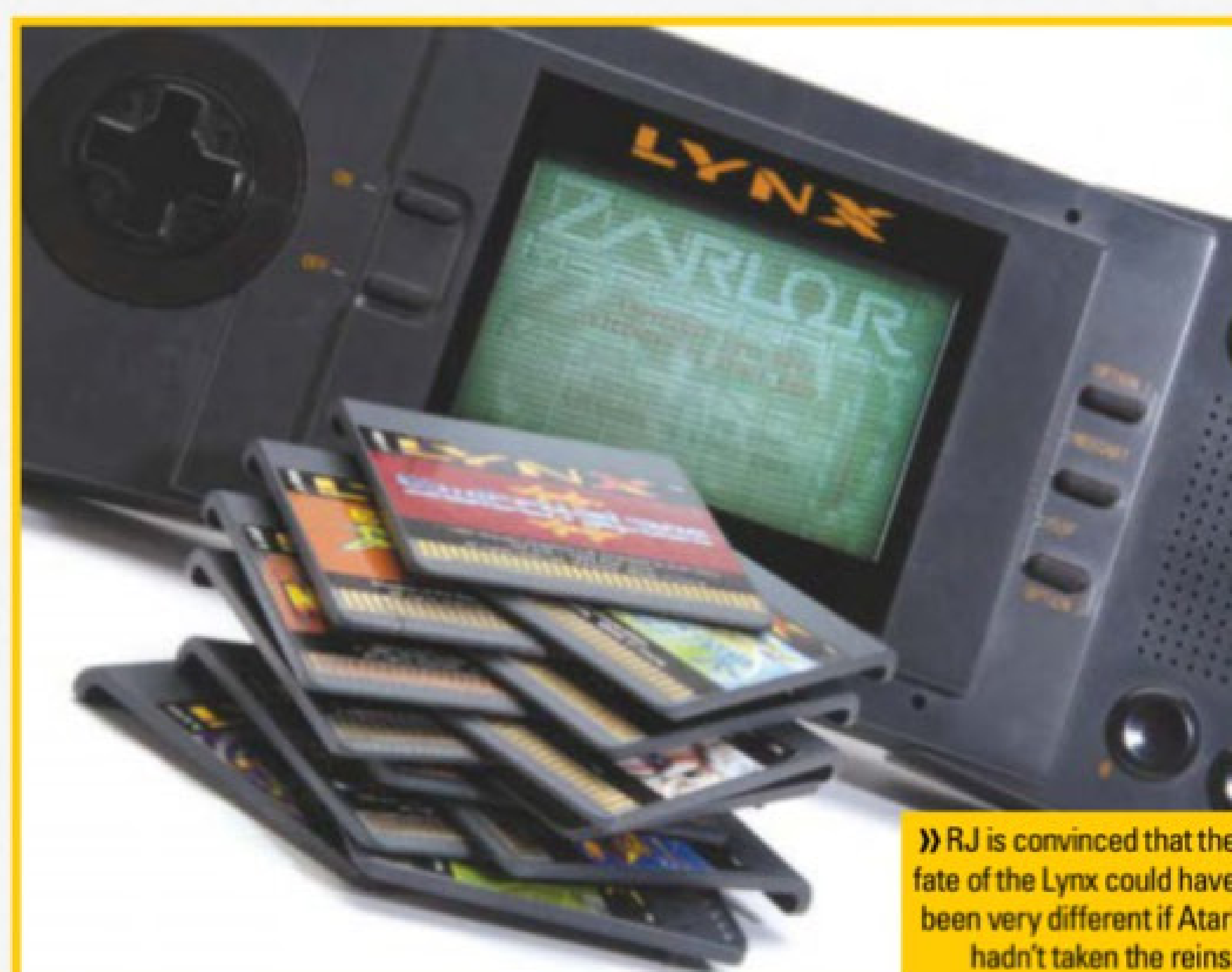
> "Trip Hawkins had us all believing that the 3DO would be built into the walls of houses!"

How did you feel when Trip Hawkins got involved? Were you excited or a little tentative?
We were sober about it. We were concerned about a lot of the stories we'd heard about Trip in the industry and what it would be like to work with him and what independence we'd be giving up. We were mildly apprehensive about that part but on the other hand, this was Trip Hawkins, who'd founded the largest software entertainment company on the planet! He's had some highs and lows with various companies since then and he's kind of like the rest of us now, but back then, he was the Electronics Arts guy who was taking the game to the next level.

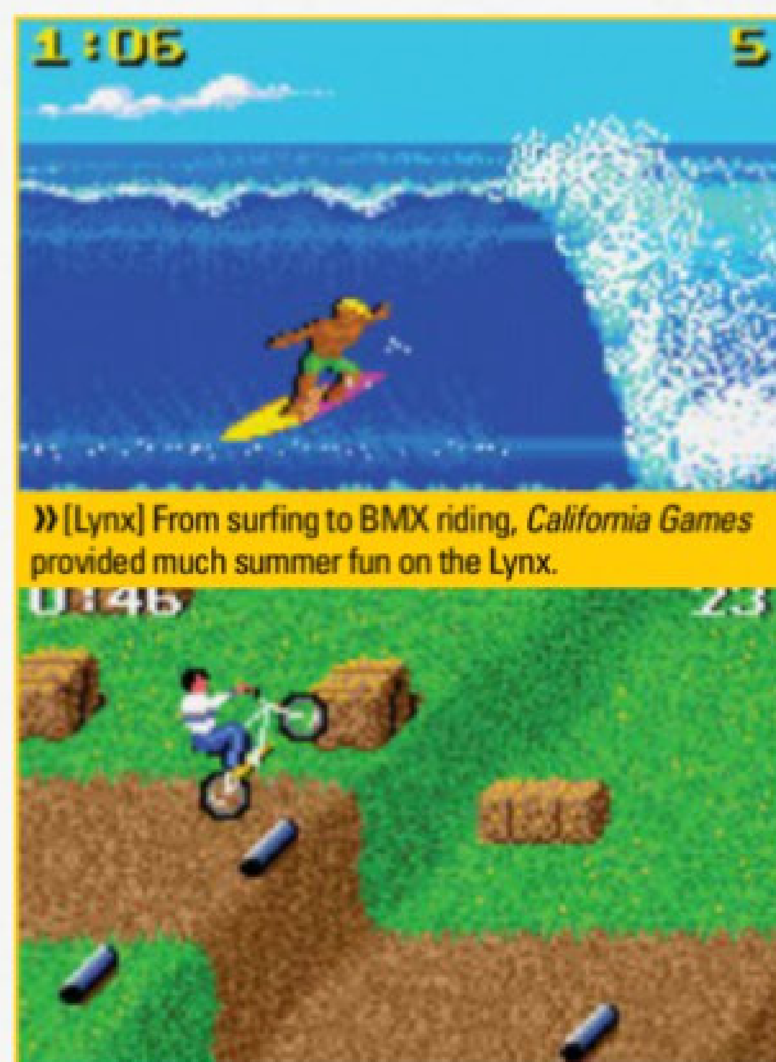
What did he bring to the 3DO project?
Trip was, and still is, an awesome salesperson for a concept. He can talk it through and get everyone sat round the table to say yes. He's a consummate professional. A performer, a presenter, a communicator of ideas… he had us *all* believing that 3DO wasn't just a great system, it had the potential to change the way we did entertainment in our homes. He had us all believing the 3DO would be built into the walls of houses. It would stream in stuff and you'd have screens hooked up to it all over the house. It was your internet access, your movie access… it was truly prescient and a lot of that came from Trip.

The 3DO sadly never quite delivered on its early promise. What do you think went wrong from your perspective?
The hardware was great, I think the operating system was awesome and in the beginning there was a lot of respect for Trip and the 3DO. It was being embraced by the industry and the public – the value of the stock gave us the financial muscle to get the thing out there… and then they brought it out at that ridiculous price.

Do you see the high price tag as the key mistake?
Absolutely. The thing that makes Nintendo, Sega and



» RJ is convinced that the fate of the Lynx could have been very different if Atari hadn't taken the reins.



» [Lynx] From surfing to BMX riding, *California Games* provided much summer fun on the Lynx.

YOU ASK THE QUESTIONS



We were inundated with questions for RJ. Here is a selection of his replies

NORTHWAY: Did you see the 3DO operating system as like the Amiga mark two?

We got better as the years went by. The first Amiga operating system was truly created by kids but the next one was better and the next one was better than that. When we got as far as the 3DO, we finally knew what we were doing [laughs]. The 3DO was a professional device. The Amiga was a work of love. It was a noble pursuit; we were giving something to the world and I've never had an experience like it since.

SZCZEPANIAK: Who were Fred and Deloris, the 'mentors' you've referred to in the past?

They were a wonderful, wise, well-travelled couple in their 50s. He was the Dean of the College of Architecture and Art and she was the librarian at the University of Illinois where I went to school. They kind of adopted me into their lives when I was 19. They put their arms around my shoulders and helped me learn and grow. They really changed my life. With the 3DO, we created two graphical techniques which we couldn't think of good names for, so we called them Fredluscing and Delorisizing!

ANTSBULL: What was it like working with Jay Miner?

I've spoken about how the Amiga experience has so much heart. Well, a lot of that came from Jay. He wanted the Amiga to change the world and we became believers in his religion! In the final dark days before Commodore bought us, when it looked like we were going out of business, it was Jay who took out a second mortgage on his home so we could keep operating. He was that kind of guy. He was the king of Amiga and I miss him so.

MERMAN: What game made the best use of the hardware you designed?

That's a hard question! The one that took me off guard and took advantage of the system as well as being an enjoyable experience would be *F/A-18 Interceptor* on the Amiga.



» The 3DO may have been a commercial failure but it was undoubtedly a prescient bit of kit. See our big feature in **RG** 122 for more on this intriguing console.



» [3DO] From grim reapers to hanging men, *Escape From Monster Manor* was a creepy take on *Wolfenstein 3D*.

now Microsoft work is those guys make their own hardware. They are incentivised to make it better and more cost effective because they'll realise profits from the software. In the early days, they can even lose money on hardware. In the 3DO's case, you couldn't ask Panasonic to lose money on the hardware! They weren't interested in selling the console at a loss so 3DO could make money on the software. No one saw that, all the way up to Trip, and I include myself in that.

Could something have been done to lower the retail cost and get more units sold?

None of the manufacturers were prepared to drop the price because that's what it cost to produce and they had to make a profit. Way too late in the day, we realised we needed to pump money into their coffers, so 3DO raised the royalty on software and gave it to the manufacturers but by then it was already too late. The 3DO had got what one of my friends in the industry calls the 'stink factor'. Once something smells bad, it always smells bad and every time you hear the name, you wrinkle your nose a little.

Were you involved with developing the Panasonic M2? Could it have been a PlayStation beater if it had been released?

I was involved but not directly. I had a position called 3DO Fellow by then, which meant I could get involved with anything I wanted to. I was part of the M2 design meetings, especially the operating system, but not so much the hardware. As for competing with the PlayStation, I don't really know what they were planning for the games side.

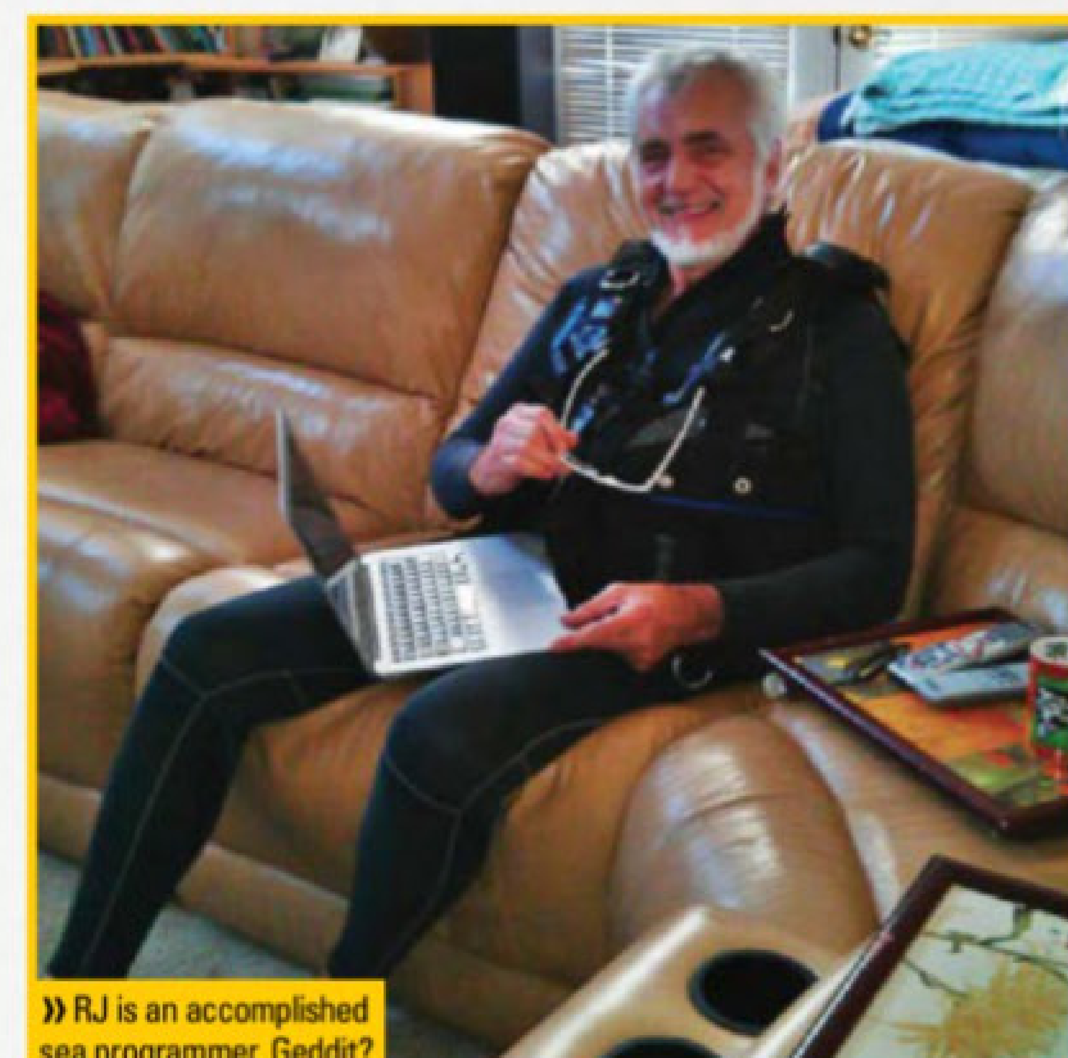
You left 3DO in 1995 and for the next decade you were involved in many interesting start-up projects, including a proposed handheld console for Ericsson.

I'm so heartbroken that never saw the light of day. It would have rocked. Imagine the Sony PSP but more rounded, looking more like a Lexus than a Mercedes. It had two joysticks, shoulder buttons and a PSP-quality display and we had a plan for online distribution that pre-empted everything that's out there now. We even had mock-ups of the stand we were going to have at E3! Then, in 2000, Ericsson had a major crash and they pulled the plug. We were stunned. I mean, this thing was vibrant and awesome and ready to go. I still have the prototypes!

You went on to join Sony, working on system architecture and tools for the PSP, the PS3 and the Vita, and now you're director of games at Google. That sounds like an exciting gig!

It's like I've landed in engineering and invention heaven! I'm serious! I work in the Fun Propulsion lab and we want to make Google number one in the game space. We have lofty goals and we know we have a lot of work ahead of us but I'm surrounded by really smart people – decent, honest people – with different views and perspectives and Google really promotes cooperation, communication and sharing. It's a love-fest working with them!

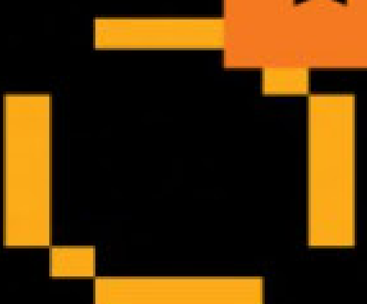
Visit www.mical.org for more on RJ's amazing career and to sign up for his Monday Morning Tickler. Thanks to Martyn Carroll for supplying additional images.



» RJ is an accomplished sea programmer. Geddit?

Panzer Dragoon Mini





DON'T CHASE THE DRAGOON, MMKAY

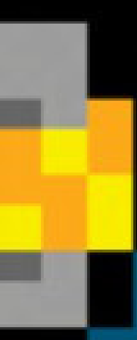
» Sega
» Game Gear
» 1996

Sometimes you have to see something for yourself. I'd fallen in love with Sega's *Panzer Dragoon* series after first experiencing it on my friend's Saturn, and eventually bought all three games. I'd love to tell you the story about how I purchased *Panzer Dragoon Saga* for just three British pounds, and how our current staff writer Nick Thorpe nearly bought it from me (at a greatly inflated price of course) at CGE UK 2005, but that's a tale best saved for another day.

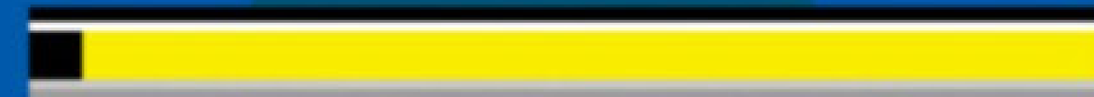
No, this is the sad tale of when I realised that the version of *Panzer Dragoon Mini* that was in my head turned out to be nowhere near its reality. I'd experimented with the Game Gear after playing with a friend's and while it wasn't a patch on Atari's Lynx I loved the Sega exclusives it offered.

As a result *Panzer Dragoon Mini* was top on my list and became one of the few imports I bought for the machine. I needn't have bothered, as it was a world away from previous games. Clearly aimed at younger gamers, it featured basic visuals, an erratic reticule and simple enemy waves. Gameplay switched between into-the-screen *Space Harrier*-style flight and side-on shooting, but it couldn't hide the bland approach of Sega's game.

I completed the game – I'd paid £40 for it after all – but it was a bitter pill to swallow seeing one of my favourite modern franchises stripped back to its bare bones like that. *





RED
HEIGHT 5.01M
WIDTH 11.89M
WEIGHT 411KG



>> Now both parts are available, we've decided to review Broken Sword 5: The Serpent's Curse. Has the wait been worth it? You'll have to read the review and find out. We also take Mario Golf: World Tour for a spin and get to grips with System 3's Putty Squad

Broken Sword 5: The Serpent's Curse



JUST LIKE FOOTBALL IT'S A GAME OF TWO HALVES

INFORMATION

- » **FEATURED SYSTEM:** PC
- » **ALSO AVAILABLE ON:** iOS, PSN, ANDROID, MAC, LINUX
- » **RELEASED:** OUT NOW
- » **PRICE:** £18.99
- » **PUBLISHER:** REVOLUTION SOFTWARE
- » **DEVELOPER:** IN-HOUSE
- » **PLAYERS:** 1

BRIEF HISTORY

» The original *Broken Sword* was released in 1996 and quickly won acclaim due to its smart story, historical slant and carefully balanced puzzles. It's gone on to receive several notable sequels, with *The Serpent's Curse* starting off as a Kickstarter project.

» [PC] Just getting to interact with certain characters can be a puzzle in itself.



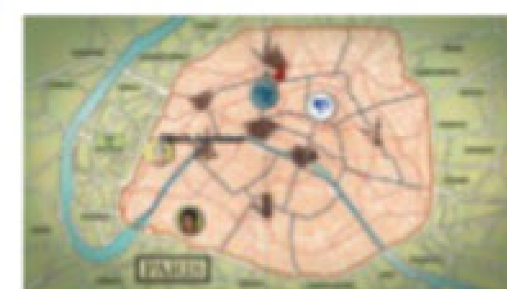
Like *ShadowRun Returns, Broken Sword 5* started off life as a Kickstarter project. It easily smashed its $400,000 pledge price and we're now finally getting to enjoy the fruits of Revolution Software's labours.

As with previous games in the series, *The Serpent's Curse* continues the adventures of George Stobbart and Nicole 'Nico' Collard, as they travel around Europe looking for an artefact.

While attending a Parisian art gallery that George's company is insuring, a thief steals a seemingly unimportant painting and kills the art owner in the process. It's a solid premise and is held together by Revolution's typical attention to detail and some extremely dramatic pacing. As George and Nico investigate further, they soon uncover a dastardly plot that involves a religious order known as the Gnostics, which could bring about the destruction of the world.

After associating the series with the Knights Templar for so many of the previous *Broken Sword* games, it's refreshing to see Charles Cecil and his team tackling different religious works – in this case the Gnostic Gospels – and adding their own spin to it. The story is well-crafted, never feels too bogged down in history and zips along at a nice pace. Cecil is no stranger to weaving an imaginative yarn and while the story and payoff aren't up to the standards of the original game, it's still a very enjoyable ride. George and Nico are as charming as ever and remain a totally believable duo, while many of the new characters are just as well written too.

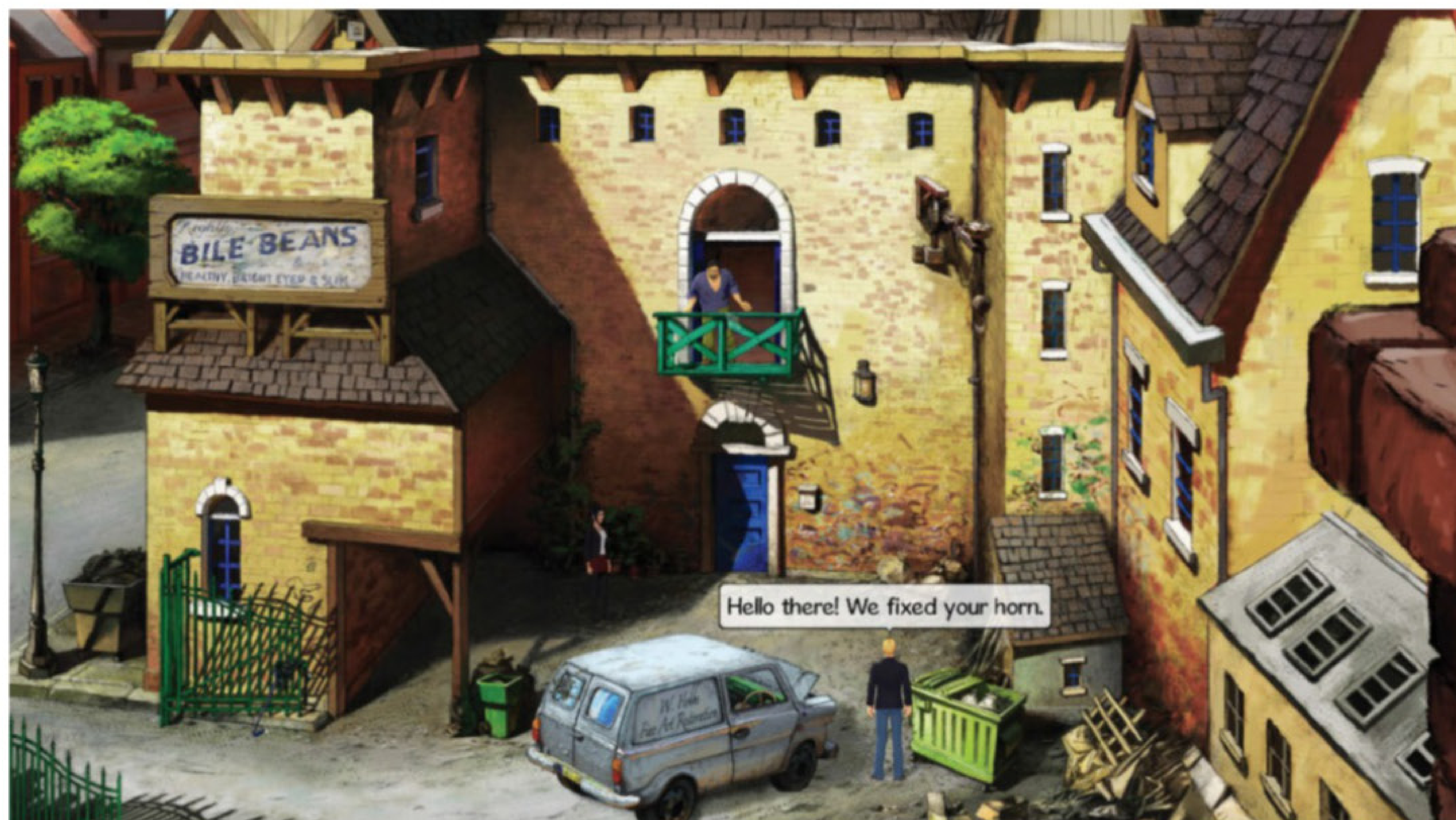
Another charming aspect of *The Serpent Curse*'s story is just how much fan service has been woven into it. Numerous characters such as Sergeant Moue, Fleur and Lady Clarissa Piermont are just a few of the characters to reappear, while there are plenty of other nods to past games, including a brand new goat puzzle (although this time around it's much,



» [PC] The map system is a nice touch, working nicely with your investigating in *Episode One*.



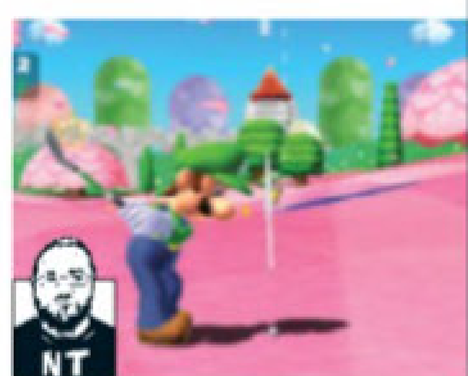
» [PC] Puzzles are very easy in *Episode One*, but the difficulty does ratchet up in *Episode Two*.



PICKS OF THE MONTH

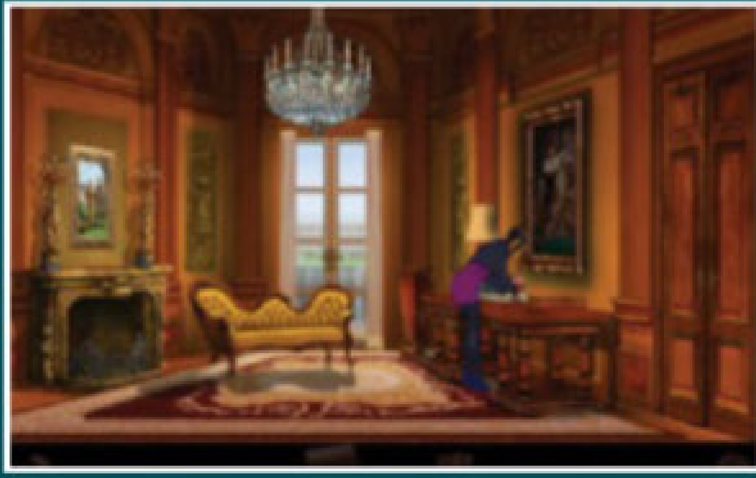


DARRAN
Broken Sword 5: The Serpent's Curse
It's not perfect, but I really enjoyed my time with George and Nico.



NICK
Mario Golf: World Tour
Some odd design choices mar an otherwise enjoyable game of golf.

A Short History Of Broken Sword



Broken Sword: Shadow Of The Templars

The original *Broken Sword* remains the best game in the series. It's exceptionally well paced, has plenty of entertaining characters to interact with and benefits from a tight, witty script. Later remasters included a brand new section where Nico is playable at the game's beginning.



Broken Sword II: The Smoking Mirror

Charles Cecil and his team moved away from the legend of the Knights Templar to tell a far darker story. It benefits from improved visuals and a much more robust engine, but wasn't as critically popular. It introduces Nico as a playable character at certain points in the game.



Broken Sword III: The Sleeping Dragon

The Sleeping Dragon was controversial for some because it's the first *Broken Sword* game to be in 3D and not be a traditional point-and-click adventure. While it suffers from stiff controls and repetitive puzzles, it benefits from a fantastic script and a far more cinematic feel than its predecessors.



Broken Sword: The Angel Of Death

This was a collaboration with Sumo Digital, which saw the series return to its point-and-click roots. It still suffers from some clunky controls, but the puzzles are far better, while the overall pace and acting is much better than previous games. Interestingly, it's the only *Broken Sword* game that's a PC exclusive.

much easier). You can really feel that a lot of love has been poured into *The Serpent's Curse*, so it's something of a shame that the rest of the game doesn't quite match the slick story and solid characterisation.

Take the puzzles for example. While many of them are decent and well thought out, few of them are truly memorable. They certainly get a lot more obscure in the second half of the game, but the vast majority of them won't have you scratching your head for very long. Many of the puzzles are very obviously signposted, with verbal hints from the main characters, which suggests that Revolution is more interested in you solving the actual story than getting stuck and never discovering its conclusion. It's admittedly a difficult line to walk, and it certainly falters a little in the second half of the game, but there's little here that's as frustratingly difficult as *that* goat puzzle in the original game.

It's not just the puzzles that are inconsistent, *Broken Sword*'s art design also wobbles somewhat. *The Serpent's Curse* features the same beautifully hand-drawn locations that have appeared in the first two games, but these beautiful reproductions of London, Paris and Spain are marred by annoyingly out-of-place character models. The 3D models used feel dull and lifeless and oddly animated, pulling you out of the otherwise stunning locations. It's not a game breaker by any means, but it does become jarring and makes you wish that the series had just stayed true to its original roots.

Fortunately, while the visuals are a little lopsided, the same can't be said for the audio found in *The Serpent's Curse*. It's of a high standard throughout with suitably moody music that keeps pace with whatever is happening on-screen. It's complemented by some highly entertaining voice acting, with Rolf Saxon once again on fine form as George Stobbart. He deftly delivers Cecil's tight script and, along with the rest of the cast, helps breathe life into *The Serpent's Curse*'s entertaining and dynamic characters.

Less impressive is the noticeable difference between how the two halves of the game play out. *Episode One* is a lot more enjoyable due to its investigative nature that allows you a certain amount of freedom as you can navigate around a map on your search for clues. The second half of *The Serpent's Curse* is a far more linear affair making it feel as if it's been a little rushed. It also suffers from a rather disappointing finale that's nowhere near as dramatic as *Episode One*'s cliffhanger. There's no denying that the overall presentation remains high, but its higher focus on more obscure puzzles means it lacks the variety of both *Episode One* and other games in the series.

The pace of the game throughout is good though and there are plenty of opportunities to switch between both main characters, giving *The Serpent's Curse* a nice film-like feel. It certainly doesn't outstay its running time (around 12 hours) but it does feel a little too familiar, as if Revolution was more concerned about simply keeping its backers happy, rather than moving the series in line with newer point-and-click adventures. A solid outing that perhaps plays it a little too safe.



» [PC] The backdrops are scrumptious and beautiful to look at. It's a shame the characters aren't as impressive.



» [PC] You can play as Nico at various parts of the game, but the focus typically remains on George.



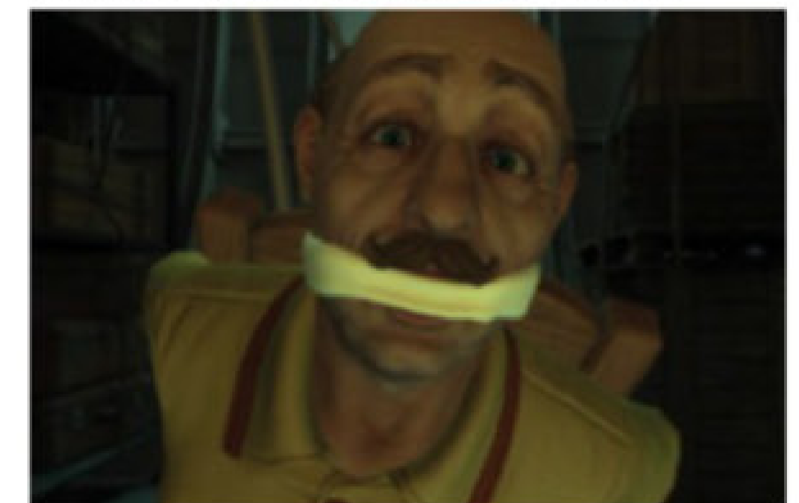
» [PC] The goat is a welcome touch for fans, but he does outstay his welcome somewhat.

★WHY NOT TRY

▼ SOMETHING OLD
INDIANA JONES AND THE FATE OF ATLANTIS (PC)



▼ SOMETHING NEW
THE RAVEN: LEGACY OF A MASTER THIEF (PC)



In a nutshell

It's certainly not adding anything new to the genre, or the series for that matter, but the story is well told and it's always a pleasure to be around George and Nico. An enjoyable and entertaining yarn.

>> Score **75%**

RETROROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

DOWNLOAD OF THE MONTH

NES Remix 2

INFORMATION
» **System:** Wii U » **Buy it for:** £8.99
» **Buy it from:** Nintendo eShop

You can't help but feel a little cynical when you're playing *NES Remix 2*. There's no doubt that it's a highly enjoyable game that improves on the original, but it's incredibly quick turnaround suggests that Nintendo was holding the best bits back, to ensure that it would get two bites at the gaming cherry.

Cynicism aside, it's hard to not be impressed, as there's a lot to like about *NES Remix 2*. If you've never played the original, it's essentially a selection of *WarioWare*-style mini-games based on some of Nintendo's most famous NES games. While the original was let down by a number of clunky titles and a baffling abundance of sports games, this sequel is far better. Yes there are fewer games this time around, but the overall quality is far higher, which in turn makes for more enjoyable mini-games. One minute you're sucking enemies up as quickly as possible in *Kirby's Adventure*, the next you're displacing germs in *Dr Mario*. You might have to kill a set number of goombas in *Super Mario Bros 3* or outrace boos in *Zelda II: The Adventure Of Link*. The sheer amount of variety on offer is extremely satisfying, while the fast-paced nature of the gameplay adds to the overall manic pace that *NES Remix 2* plays at.

In addition to games based around popular classics, there are also a large number of remixed version to tackle that take a section of a classic game and greatly change how it plays, so you might be controlling three Marios and attempting to reach the exit in *Super Mario Bros 3*, or collecting a set number of coins while controlling Link. As with the normal mini-games a three-star score rating is used, with the third, final star being quite difficult to achieve. The Remix levels are predictibly far tougher than those found in the core games, but they never feel unfair.

In terms of the core games *Punch-Out!!*, *Metroid*, *Kirby's Adventure*, *Super Mario Bros 2* and *Super Mario Bros 3* fare the best, but even the likes of *Ice Hockey* and *NES Open Tournament Gold* feel better structured, as if Nintendo has really put thought into how each mini-game can be approached. Unlocking of new games and remixed levels is handled nicely, while the obligatory stamps are also available so you can show off how well you're doing on MiiVerse. There are only 12 games in total, but the sheer amount of challenges will keep you busy for some time to come.

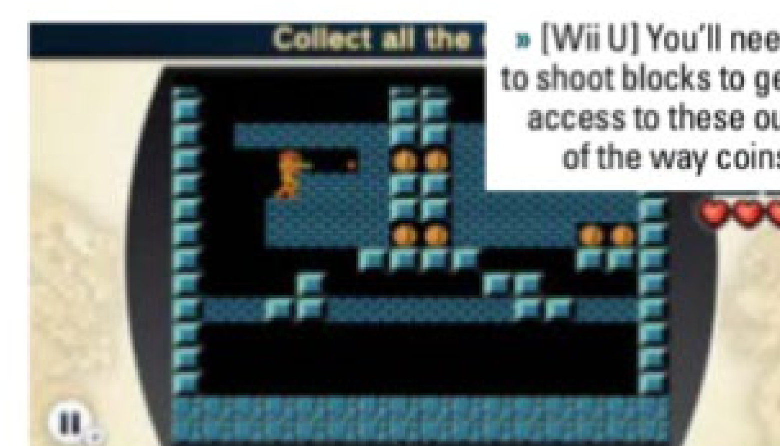
Longevity is also assured thanks to the new online leaderboards that have been included, while Nintendo has also included a rather spiffy Championship Mode, which is based on the famous Nintendo World Championships. You can also share videos of your best plays and get a full game in the form of *Super Luigi Bros*, which identically mirrors the original NES classic.

NES Remix 2 is a great update that fixes many of the first game's issue. We'd love a SNES Remix next please.

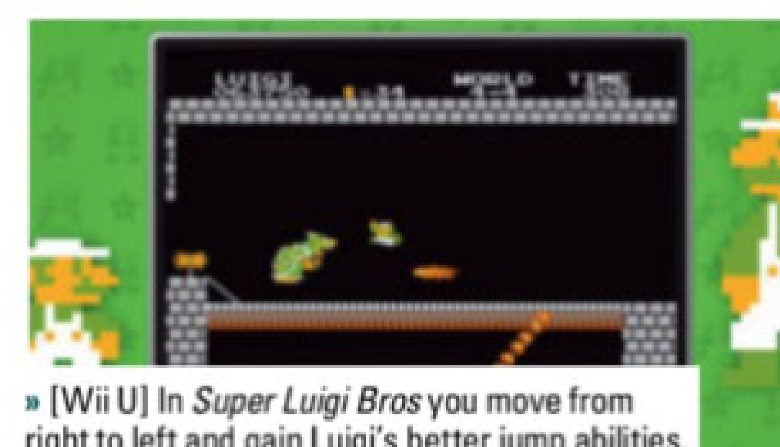
80%



» [Wii U] Finally, a good version of *Zelda II: The Adventure Of Link*. If only this was in the original game…



» [Wii U] You'll need to shoot blocks to get access to these out of the way coins.


» [Wii U] In *Super Luigi Bros* you move from right to left and gain Luigi's better jump abilities.



» [Wii U] The challenges riff off the main games extremely well.

>> OTHER HIGHLIGHTS



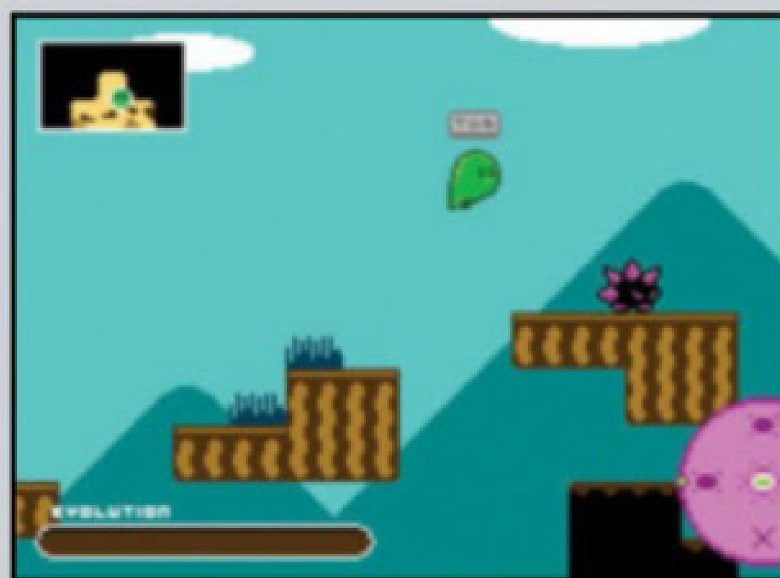
Trials Fusion
» **System:** Xbox One (tested), PS4, PC
» **Buy it for:** £15.99
» **Buy it from:** Xbox Live, PSN, Steam, U-Play
» The big new addition to the *Trials* franchise is the ability to use ATVs and the integration of tricks. While the ATVs add some much needed variety, thanks to their solid, weighty physics, the tricks feel a little too intrusive, taking away from the precision that has made past games in the series so popular. It still works fantastically well thanks to solid online integration and cleverly designed tracks, but the core formula is starting to wear a little thin.

78%



Putty Squad
» **System:** PS Vita (tested), 3DS, PS4
» **Buy it for:** £19.99
» **Buy it from:** Online, retail
» Well this is nice, a HD update that improves on its predecessor. While the frame rate irritates, there's much to like about this Vita update. Putty's moves are spread across various buttons making him easier to control; you now automatically absorb putties, while a new map makes the huge stages far easier to navigate. Longevity is offered through a new challenge mode, while the ability to collect stickers will please any Eighties child.

77%



Retro Game Crunch
» **System:** PC (tested), Mac
» **Buy it for:** £8.99
» **Buy it from:** Humble Store
» This bundle of seven bite-sized games is packed with variety, taking in genres from puzzler to beat-'em-up, with highlights including evolution-themed platformer *Super Clew Land* and the puzzler *End Of Line*. There's enough good stuff here to ensure that anyone can get something out of the game – while the games are generally easier than the NES titles which inspired them, they're crafted with care and exhibit interesting ideas.

82%



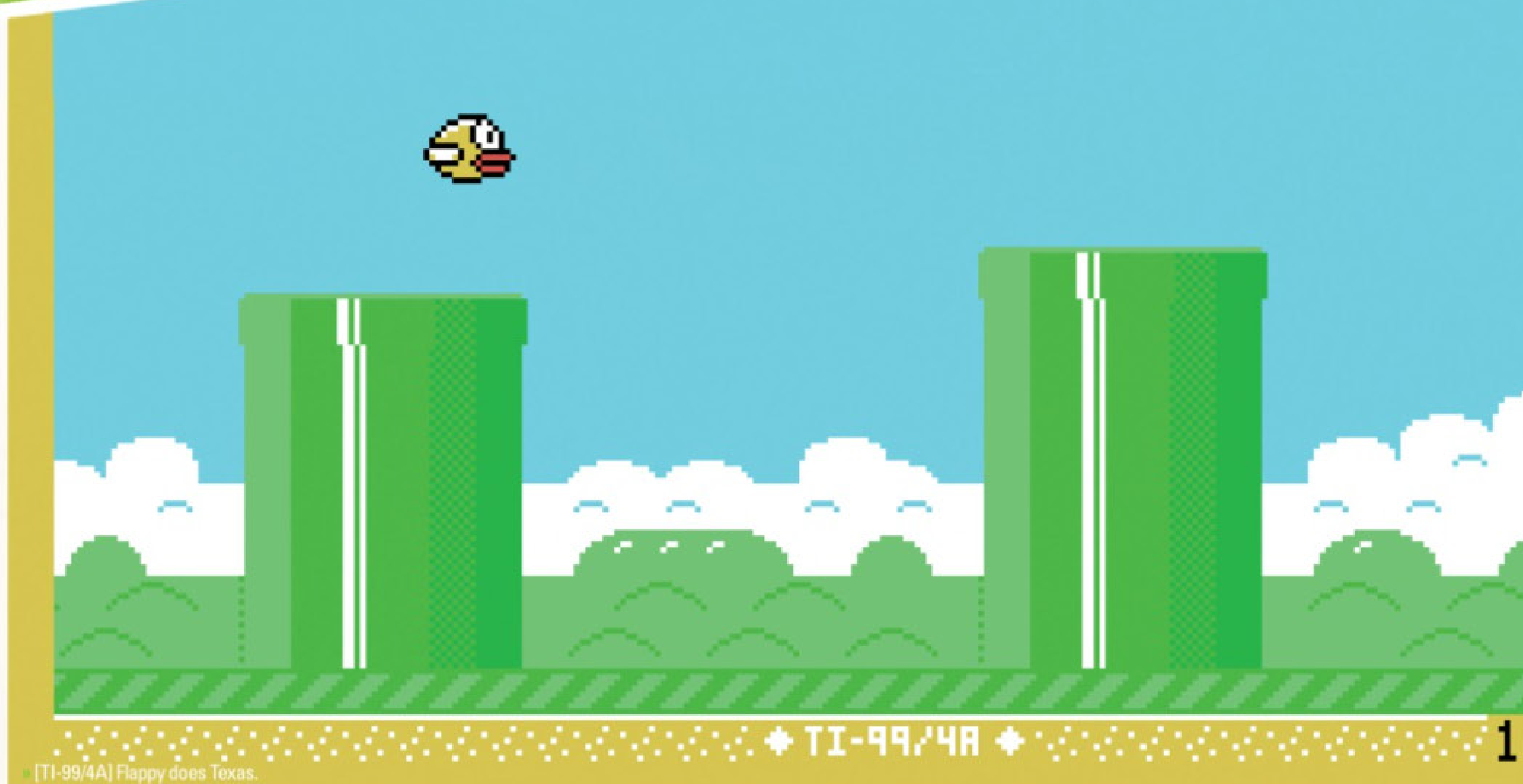
Mario Golf: World Tour
» **System:** 3DS
» **Buy it for:** £34.99
» **Buy it from:** Online, retail, eShop
» This might be the first *Mario Golf* game in a decade, but fans of previous versions will feel right at home here. It's not without problems, though. Unlockable content is integrated poorly with the main single-player mode, and with the exception of *Mario Kart*-style items the game exhibits little innovation compared to past games in the series. It's still worth your time however, as the arcade-style take on golf is as fun and accessible as ever.

74%

Welcome to Homebrew



>> It appears that there's no escape from the popularity of Flappy Bird, with numerous homebrew developers just itching to create their own infamous version. Won't someone think of the children!



[TI-99/4A] Flappy does Texas.

HITCHCOCK WOZ 'ERE

Flappy bird heads to… well, everything

At the moment we feel a little like Tippi Hedren. Last issue we reported on three 'demakes' of popular if maddeningly frustrating iOS game *Flappy Bird* for the C64, ZX81 and Atari 8-bit, only to turn around and find ourselves completely surrounded by the little devils! At the time of writing we're aware of 19 flavours now including a second C64 iteration from seasoned developer Roy Fielding who was interviewed in **Retro Gamer** a few issues back, some 3D red screen action on the Virtual Boy, a TI-99/4A conversion which arrived unexpectedly from the incredibly prolific Rasmus Moustgaard and the more than slightly bizarre *Jet Pilot Rising* on the SNES which replaces the feathered star with a cat which has been strapped to a rocket. The Spectrum and SNES are currently joint leaders of the pack and boast three releases each, although one of the Spectrum games may not count since it's a text adventure entered into the annual Comp.Sys.Sinclair Crap Game Competition. No really.

Much as we love this rush of releases, it has left us with something of a dilemma; in order to review all of them we'd need to use at least two issues' worth of Homebrew space – and that's only assuming there aren't going to be any more flying over to join the flock – but if we only deal with some there are bound to be people out there bemoaning the lack of coverage for their respective platforms. So we're going to try covering all of the bases by compiling a list of links to the clones and variants out there and as we're made aware of new versions we'll add them as well; the URL for that list is Kikstart.eu/flappy-index and after this issue we're only going to cover the new instalments which do something exceptional with the format.

> "The Spectrum and SNES are joint leaders with three releases each"

Incoming

There's some interesting ports this month, including Mega Man and Castlevania

KIKSTART.EU/NINJA-TWINS-SPEC



▲ Fun but taxing indie puzzler *Ninja Twins* has been converted to the Spectrum and given new level data.

▼ There are previews of multiple levels now, so the conversion of *Mega Man* for the Amiga should be here soon.



KIKSTART.EU/MEGAMAN-AMIGA

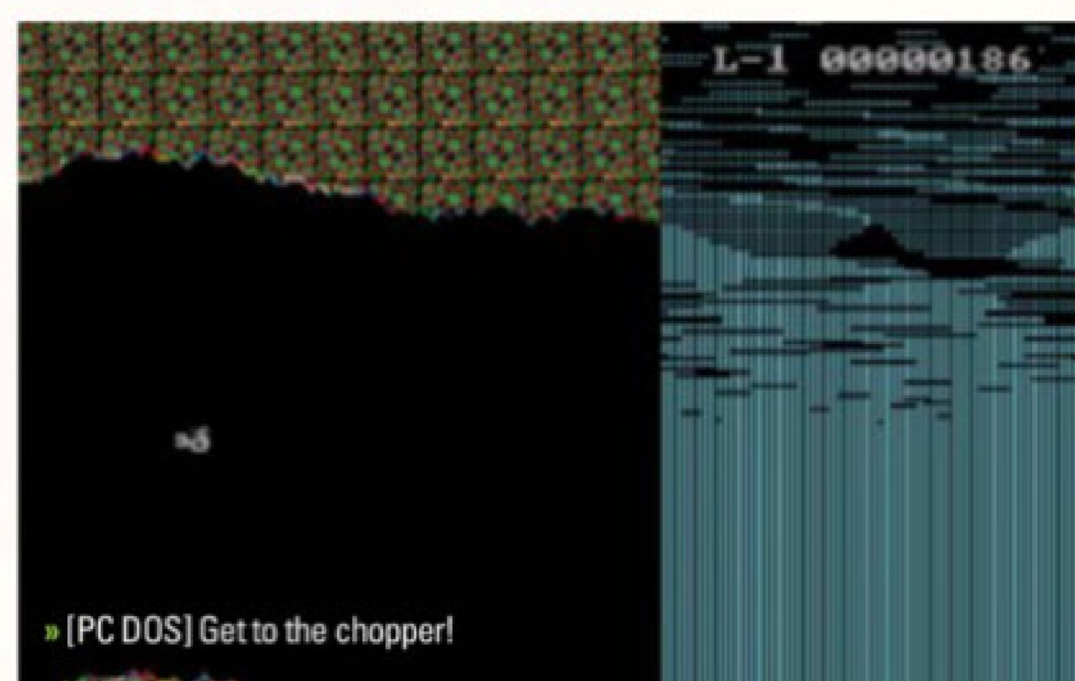
KIKSTART.EU/CASTLEVANIA-PRV-SPEC



▲ Another conversion that is hopefully on its way soon is *Castlevania* for the Spectrum – check it out.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk



» [PC DOS] Get to the chopper!

NO FLAPPING, OR BIRDS

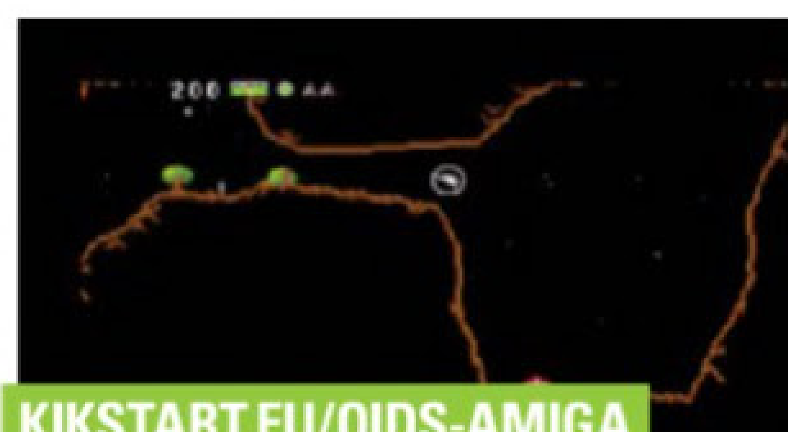
Sticking with the *Flappy Bird* mechanics but skipping over the titular avians entirely for a moment, there's a new version of *Copter Game* which was crammed into a mere 256 bytes and targeted at DOS-based PCs and users with more current hardware running DOSBox. We found it pretty finicky to get going but *HeliCave* seems to be faithful to the original and is less frustrating to actually play than the various *Flappy* games as well. Kikstart.eu/helicave-dos goes to the Pouet.net page for a download and some notes about getting the game running.

COMPETITION MASTERS

The voting for the yearly coding competition at SMS Power should be over by the time we go to print and there have been eight entries this year including a promising early preview of a *Bruce Lee* conversion, a *Bomberman* clone called *Boom* which uses a custom four-player adapter, a couple of renditions of *2048* and a conversion of the text-based *Colossal Cave Adventure*. As seems to be the norm for this competition, some of the entries aren't finished yet but it's worth having a look at everything and the link is hiding behind Kikstart.eu/sms-coding-2014.


» [Master System] A Brucey bonus.

▼ Atari ST exclusive *Oids* is a little less exclusive after programmer Meynaf modified it to run on the Amiga.



KIKSTART.EU/OIDS-AMIGA

Homebrew heroes

This issue we're talking to Michael Gibs about his Amiga iteration of Flappy Bird to find out why it seems to be a magnet for programmers right now and what could be redesigned



What initially drew you to the game *Flappy Bird* as a possible Amiga project?
It all started at work, some co-workers had shown me this game, telling me they thought it was crappy. I said, 'okay… but are you able to code it?' As IT people, they answered with an unsure 'yes' so to challenge them I said 'okay, choose the platform and the language of your choice and let's do it'. And to this day, I still haven't seen even a pixel from their version.

And just how difficult was it to convert from the smartphone game to an Amiga?
Dong Nguyen did the original game in three days. As I work during the day, I did it in three evenings instead and it was pretty easy. First I had to code the gravity – the sprite was a 17x12 pixel white box at this point – then I drew the graphics and got the objects moving, then the collision detection and finally some code optimisation. There are some videos that I was sending to my friends during the development on YouTube – Kikstart.eu/flappy-amiga-video.

You've kept the design very close to the original iOS game, but were you tempted to redesign it at all?
Of course… I have seen some funny videos, but I decided to do the original game first. Then maybe a sequel…

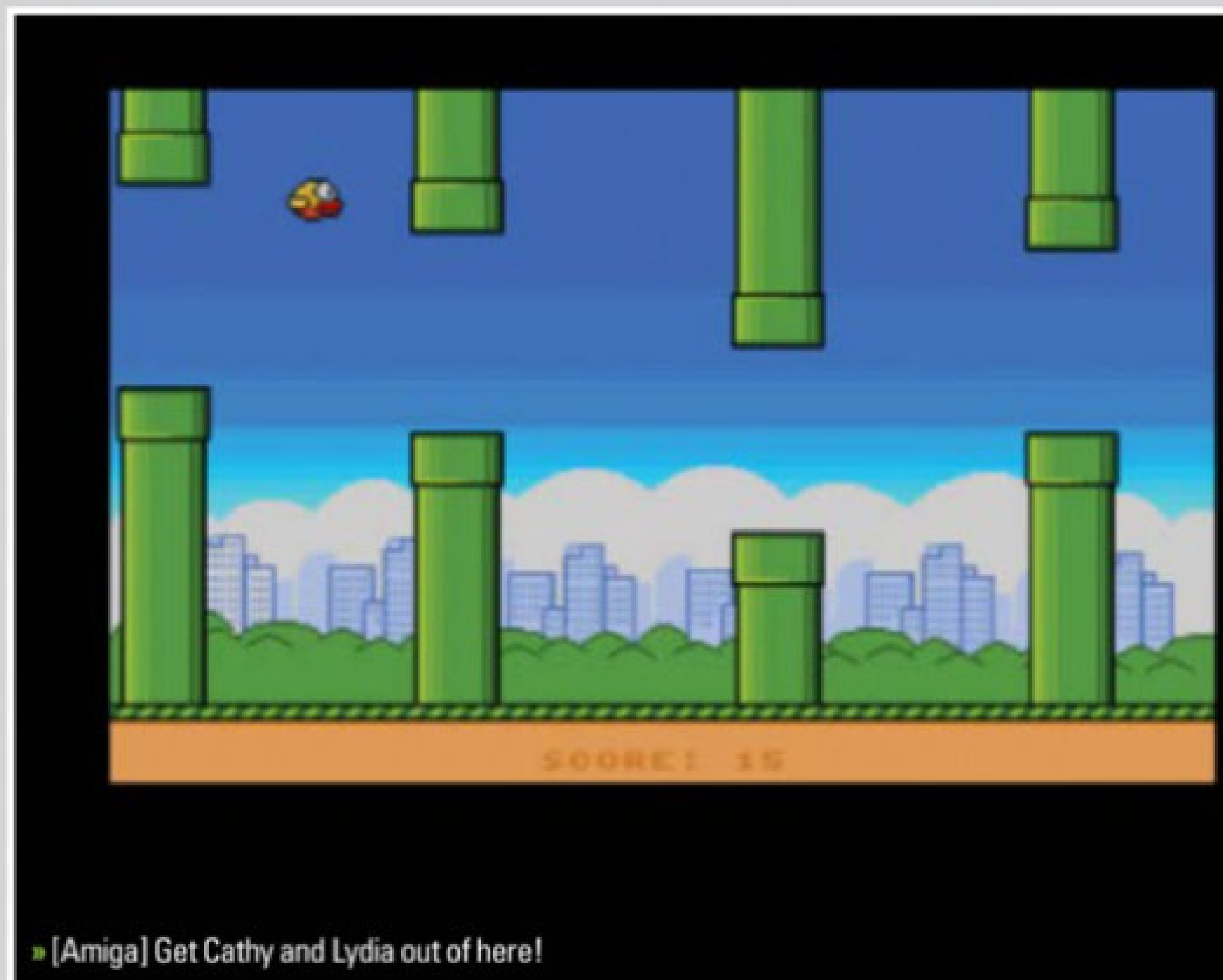


» [Amiga] AMOS on a real Amiga.

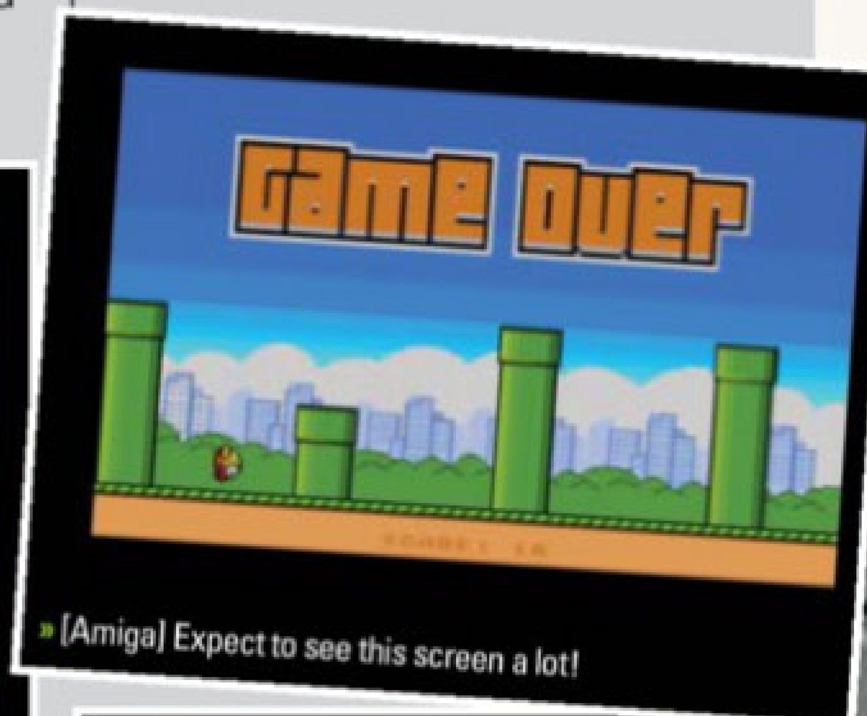
So what sort of thing would you be putting into *Flappy Bird 2* then?
I'm not sure at the moment… But if you really want to know the idea I have in mind at the moment, it would be *Flappy Joyride*, a mix of *Flappy Bird* and *Jetpack Joyride* for the fun of it.

And with hindsight, is there anything you feel could have been done differently?
One month after the release I decided that I would have coded it differently to make it run like it is on a stock Amiga 500. But, my main Amiga has a 68060 running at 60MHz and I thought I could adapt it!

And can you tell our readers what projects you are planning to work on next?
I need to finish *Snaky*, a snake game. I have started it with Yoz Montana, the guy who designed the beautiful black Amiga cases that were available to buy on the now defunct Commodore USA website. I also need to release an update for Tiny Launcher, a game launcher program I have coded for the Amiga. I have four other games in mind and I will have a try at a version of *Flappy Bird* for the Amiga 500.



» [Amiga] Get Cathy and Lydia out of here!



» [Amiga] Expect to see this screen a lot!


» [Amiga] Feeling seasick… or is it avian flu?

PULSE

» **FORMAT:** COMMODORE VIC-20 » **DEVELOPER:** SVEN MICHAEL KLOSE
» **DOWNLOAD:** KIKSTART.EU/PULSE-VIC » **PRICE:** FREE

The world is under attack, this time by aliens that have started rocking up from somewhere in the 20th dimension. While we suspect that most readers have already guessed where this 'story' is going, for those who aren't familiar with shoot-'em-up plots the solution always involves a brave pilot with a small but manoeuvrable spaceship, some truly ridiculous amounts of firepower which can be bolted on from weapon crates dropped by destroyed enemies and a smooth, horizontally-scrolling landscape. And it's that last point which is the unexpected element of *Pulse*, because getting any kind of smooth scroll out of an unexpanded VIC-20 is pretty difficult to do and having a raging battle taking place within that scrolling landscape even harder still.

That said, *Pulse* is a somewhat limited game as far as shoot-'em-ups go; there's only the one level which has what appear to be randomly placed ground-based cannons and strings of airborne nasties attacking the player craft. This lack of variety will be down to the available memory – and in part the overheads required to handle that scrolling and all those software sprites – but it does mean that there isn't much in the way of longevity since there's nothing to play for in the long term apart from score. Of course that doesn't make *Pulse* a bad game and we enjoyed the unabashed carnage, it's just a bit more limited than we were hoping for when the preview was originally brought to our attention.

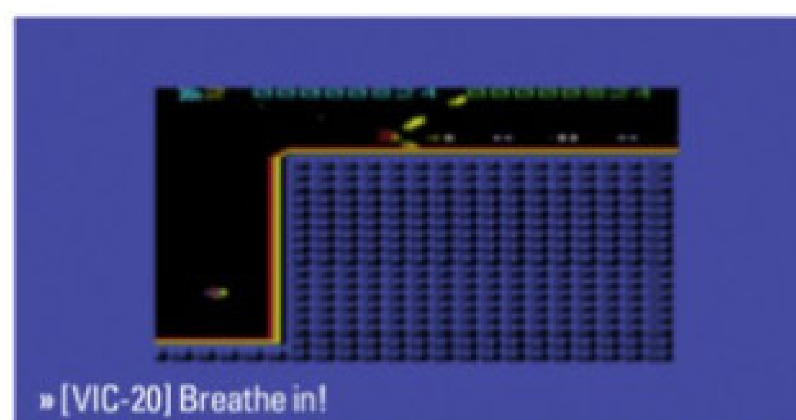
This appears to be something of a proof of concept, a testing of the water to see what the VIC-20 is and indeed isn't capable of; that would explain why it isn't perfect technically – there's quite a bit of flickering and enemies sometimes spawn partially behind the landscape – so, hopefully, means that there's a sequel on the way. In the meantime, it does become repetitive but fans of the genre who can 'zone out' should enjoy themselves and this is a milestone for the VIC which hopefully will lead to bigger and better things.

62%



» [VIC-20] A touch of deja vu?

“We enjoyed the unabashed carnage”


» [VIC-20] Breathe in!



» [VIC-20] Bravo, Mr Hero. Bravo.

Make this

This month, Jason gives you some handy tips for creating your very own text adventures

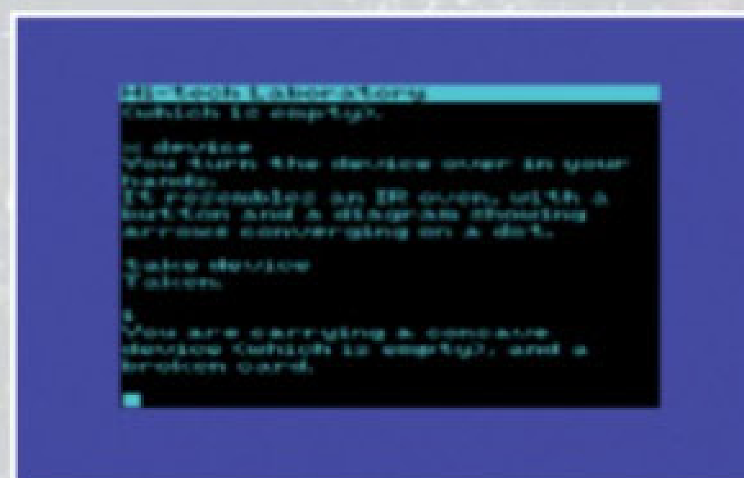
NEW

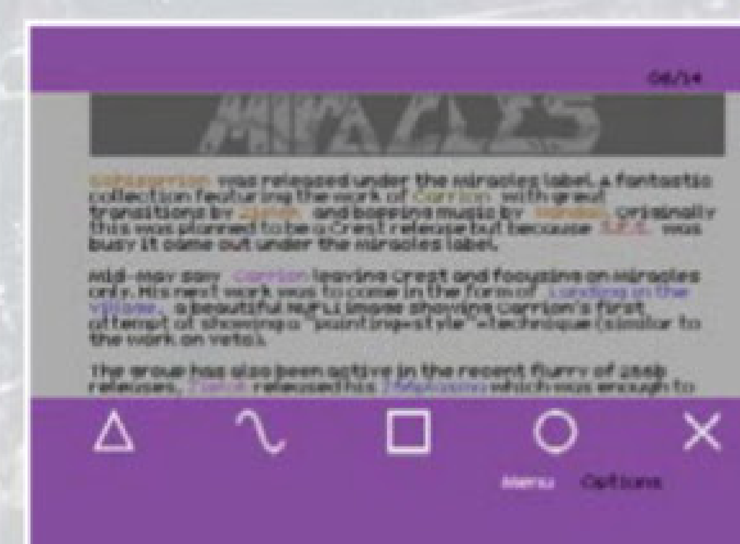
1 Some 8-bit machines like the Commodore 128, Amstrad CPC series or BBC Micro have an 80-column text mode which is great for text adventures, because it means that more information is available to the player at once; for example here's an Amstrad CPC example.

```
Usage:
  10 CLEAR 64873: LOAD ""CODE :
RANDOMIZE USR 64874
  20 INK 6: PAPER 0: BORDER 1: C
LS
  30 PRINT #4;AT 1,3;"64#4 - 4x8
 FONT DRIVER FOR 64 COLUMNS"'"by
 Andrew Owen, Crisis, and Einar
Saukas"
  40 PRINT #4: FOR f=32 TO 127:
PRINT #4;CHR$ f;: NEXT f
  50 PRINT AT 8,0;"Usage:": PRIN
T : LIST
0 OK, 50:3
```

2 But for those machines without the hardware option it's possible to either write custom text handling or use existing solutions, which place two 4x8 pixel characters into a single 8x8 pixel 'cell'. This doubles the character count.

3 Another option is to have variable widths to the letters – so I is thinner than A while W is wider – and the print routine then has to pre-shift each letter before drawing it. This neater but more complicated solution can be seen in *Cometfall* for the VIC-20.





4 Although the routines haven't been used in a game so far, there are some disk magazines from the demo scene that handle variable width characters and can have words or sentences highlighted in different colours.

» [C64] Not… going to make it!

IMPOSSIBLE GAME

» **FORMAT:** COMMODORE 64 » **DEVELOPER:** UPPERCASE AND MAYDAY
» **DOWNLOAD:** KIKSTART.EU/IMPOSSIBLE-C64 » **PRICE:** FREE

There's no storyline and nothing even approaching flashy graphics in *Impossible Game* because the player's entire focus needs to be on guiding their cube through the spike and pit infested level, a task made maddeningly difficult by the cube moving at a fixed speed and jumping over the hazards with very little in the way of clearance.

The original *Impossible Game* started life on the Xbox Live Indie service nearly five years ago where it holds a top five position in the all-time best selling games chart and there are Flash versions as well, so it's quite surprising that it took so long for someone to pick up and convert to an 8-bit. This C64 conversion is a bit bland graphically – even more so than the original – but captures the gist of the gameplay quite well and, despite having a few small technical quirks, is just as addictive as it is frustrating to play.

73%

2048

» **FORMAT:** MEGA DRIVE » **DEVELOPER:** OERG866 » **DOWNLOAD:** KIKSTART.EU/2048-MEGADRIVE » **PRICE:** FREE

The task set by *2048* seems to be simple; there's a 4x4 grid containing numbered tiles that will merge together when two with the same number collide, producing one tile with double the value. New tiles are added each move and the D-pad slides the tiles currently on screen in one of four directions. The final target is a quite daunting 2,048, which is built from two 1,024s which in turn need a couple of 512s each, so managing the 16-tile playfield to get to that point without it filling up is where the challenge lies.



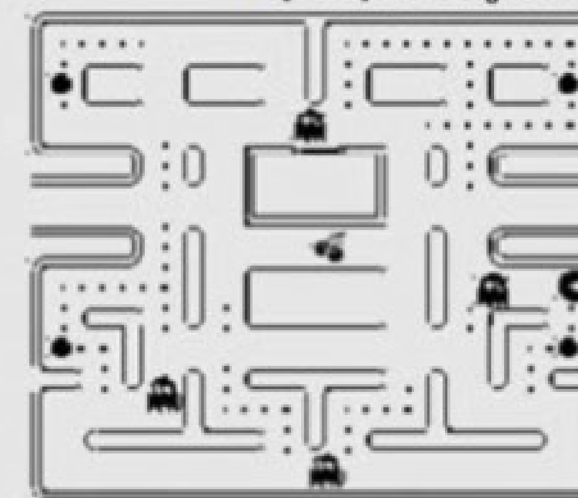
» [Mega Drive] Stealth learning of maths.

The graphics have been kept simple because they don't really need to be complicated – although we have seen a fun *Doctor Who* regeneration-themed version online – but the in-game soundtrack is very nice indeed and the gameplay is engrossing, surprisingly so considering how simple the initial premise seems.

HIRES PACMAN

» **FORMAT:** SINCLAIR ZX81 » **DEVELOPER:** BRIAN LEWIS » **DOWNLOAD:** KIKSTART.EU/PACMAN-ZX81 » **PRICE:** FREE

The ZX81 already has a few renditions of *Pac-Man* to its name, including Bob Smith's role-reversing *One Little Ghost*, but this latest one from developer Brian Lewis is a little different. Rather than just using the ZX81's ROM characters to build Paccy, the ghosts and their environment it instead renders everything as high-resolution graphics, all without equiring anything more than a RAM expansion.



» [ZX81] Make a grown man cry.

The results are impressive and, although there's quite a bit of artefacting – which is more pronounced in static screenshots than when moving – and it does flicker, we feel it can be forgiven since *Hires Pacman* plays well. The most common place where clones fail is the enemy movement, but the ghosts here are well programmed.

84%

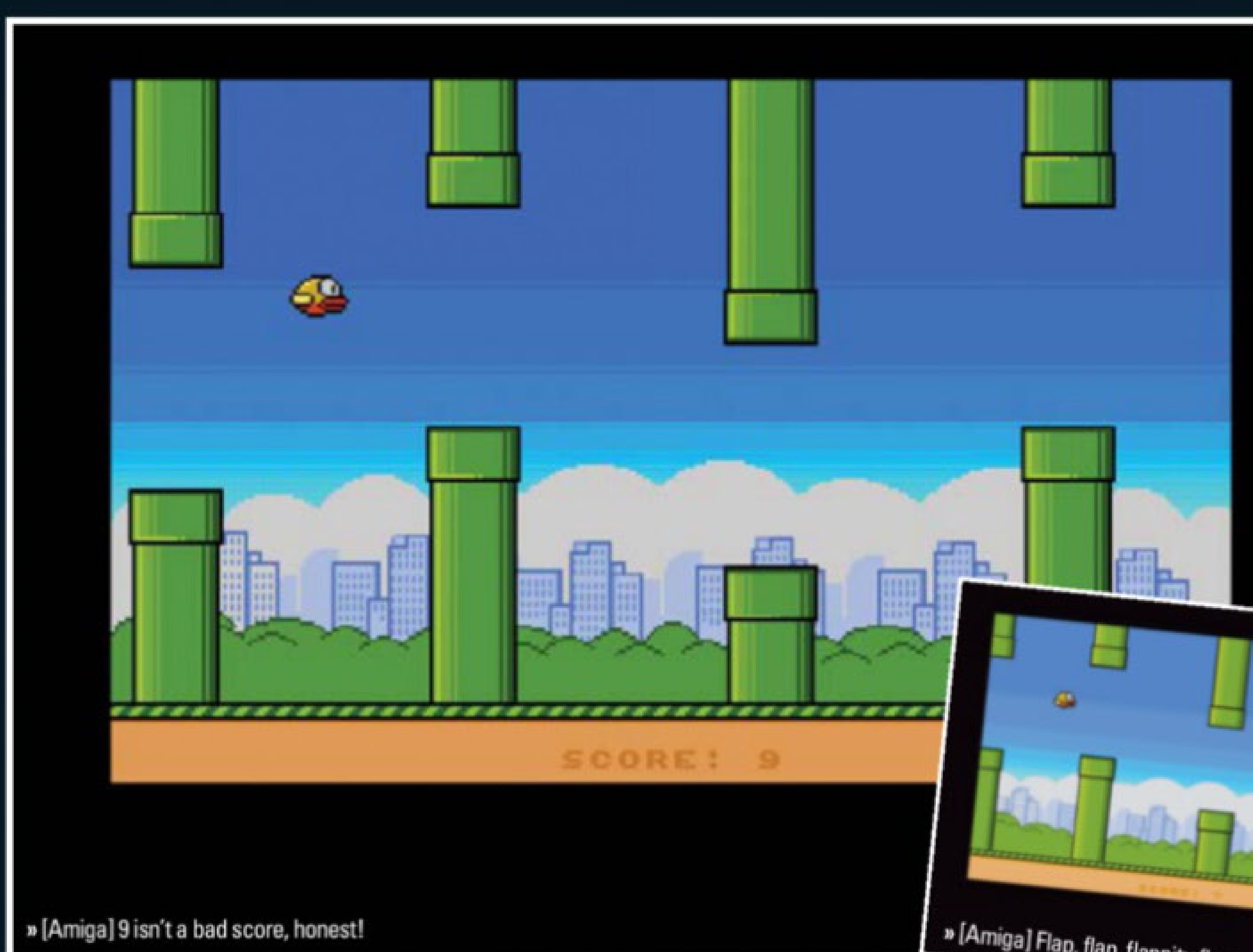
FLAPPY BIRD

» **FORMAT:** COMMODORE AMIGA » **DEVELOPER:** MICHAEL GIBS
» **DOWNLOAD:** KIKSTART.EU/FLAPPY-AMIGA » **PRICE:** FREE

Another day, another rendition of *Flappy Bird* and, since this one is running on the Amiga, it's even closer to the iOS original visually and indeed aurally than the C64 conversion we took a look at last month. And it won't come as much of a surprise that the player takes control of a cutesy bird as it navigates carefully through a series of *Mario*-style pipes and must try to balance upwards thrusts caused by pressing the space bar, left mouse or joystick fire button against the effects of gravity.

If the timing of those button presses is right the bird will bounce less than gracefully through the air between obstacles, but getting it wrong is fatal and sees birdie plummet beak first straight into the ground below. It's punishing, unforgiving and guaranteed to drive most players completely up the wall. Here's hoping homebrew developers remember there are other games to draw inspiration from.

78%



» [Amiga] 9 isn't a bad score, honest!

» [Amiga] Flap, flap, flappity flap.

MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – WWW.RETROGAMER.NET



STICK IT TO THE MAN

Dear **Retro Gamer,**
In your Movie Licence Awards feature, you award *GoldenEye* with the 'Best Picture' award. You describe modern features that the game lacks, such as dual analogue control. To my knowledge, *GoldenEye* was actually the first FPS to support dual-stick controls. You had the capability of wielding two controllers for the single player mode, allowing you to control the game exactly like you would in more modern shooters. This capability was carried on into *GoldenEye*'s sequel, *Perfect Dark* as well. That's one of my favourite things about the game. I also have to say that you look pretty badass controlling the game with two N64 controllers. I've confused many roommates who have walked in on me doing just that.

Cheers!
Mike Amos

You've definitely caught us out there! We still think the game benefits more from a dual-stick controller as used on modern consoles – when we tried it via emulation, the ability to access shoulder buttons and the sticks at the same time proved quite handy.

STARS AND STUDENTS

Hi **RG**!
Just a quick email to join the *Star Force* love-in. We had a cabinet at the University of Leicester Gilbert Murray Hall when I was there in '91-'92. Bossing the high score was a year-long event with my good friend at the time Matt Pierce (who later became editor of *PC Gamer*) going toe-to-toe with one of the Cypriot students and a guy from the common room. We loved the game, and *Cabal* when we had that on-site later on.

Anyway keep up the good work. I'm starting to think you should be funded by the government for the historical service you are now providing for digital games.
Jon Hughes



» [Arcade] Jon Hughes has fond memories of *Star Force* – did you ever have arcade machines at university or work?

It seems there's quite a bit of love for *Star Force*! Universities can be surprisingly good places to find arcade cabinets – the students' union games room at the University of Essex used to feature the likes of *Street Fighter Alpha 2, The House Of The Dead* and *Time Crisis II*, and even a couple pinball tables. Sadly, those were cleared out and the space they used to occupy now contains an international food shop and a hairdresser. Talk about doing it wrong…


» [N64] Using two N64 pads to control *GoldenEye* – a slightly clunky yet ingenious solution to the pad's single analogue stick

STAR LETTER

TIME CRISIS

Dear **Retro Gamer,**
I am a 32-year-old sales manager with a wife, four children and a big mortgage. But I'm an avid gamer, specifically retro. Brought up on Eighties consoles and living through the golden period of gaming in the Nineties, I have been spoiled with some of the best and most memorable events in gaming history.

One of my biggest pitches to others for why I love playing retro games in their native form and using a CRT TV was always that you take time out of your day to set it up, thus it becomes a cherished event as opposed to a quick rip via MAME. Also, I have moaned in the past about how easy games have become. In the past you had to earn the right to complete a game – no YouTube, no infinite continues, no save points.

However, I am now having to eat a slice of humble pie. Because of my hectic lifestyle (like most of us in our 30s and 40s), I don't have time to take consoles out of boxes and set up CRT's anymore and when I do play, my play time is very unpredictable and inconsistent (kids…). Because of these factors, I now welcome third-party peripherals like the RetroN and constant save points in games.

It's funny that the things I always hated about videogaming are now the things that allow me to keep on playing the games I love. Oh, the irony!

Kind regards,
Justin Hickman

You're certainly right, gaming can be a hard hobby to balance with a busy family life and career. While we're all for authenticity, we welcome any developments that allow more people to enjoy retro games, no matter how little time they might have – and we're glad to see you do too.


» Justin doesn't always have time to enjoy his gaming collection, but it's an impressive sight regardless

WISH YOU WERE HERE

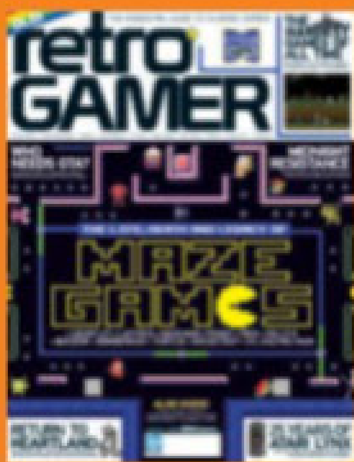
Hola from Cozumel!
Back in issue 109 I was featured in your Mailbag section after taking a picture of me enjoying a **Retro Gamer** way more than sights of the Acropolis ruins right behind me during my honeymoon. Wouldn't you know it, same thing happened while vacationing in Cozumel, Mexico (vacation, not honeymoon). Since subscribing in 2010, I've made sure to always have at least one issue on me when travelling. You guys consistently publish top notch gaming journalism month to month and travelling just isn't fun if I'm not poring through your Back To The Eighties/Nineties sections (my favourite).

Look forward to more pictures of me completely ignoring my surroundings while reading **Retro Gamer**!
Robert Leonard

It's nice to see the magazine being enjoyed in another fine location! We feel that the team should be enjoying the same amount of sun, so we're drawing up a new plan – Retro World Tour, in which we find developers in exotic locations

Don't forget to follow us online for all the latest retro updates

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DISCUSSED THIS MONTH

HD Updates

Remember when publishers would slap a new soundtrack on a Mega Drive game and call it a Mega-CD game? We've been moaning about the trend of remastering last year's hits for new consoles. The games are still great, but are the upgrades worth full-price again? We're not sure….





» Robert Leonard's holiday snaps continue to make us green with envy. Have you enjoyed **Retro Gamer** somewhere exotic?

and fly out to interview them for about a week each. Sadly though, we expect that this rather blatant attempt to blag free holidays would be quickly explosed.

I WANT TO BE FREE

Dear **Retro Gamer,**

The recent **Retro Gamer** article on the brilliant *Knights Of The Sky* reminded me why modern simulations are often so restrictive – they are too mission orientated! When one is completed we simply move onto the next on the list.

I have fond memories of the C64 game *ACE: Air Combat Emulator* and the Amiga version of *Silent Service* and its terrific sequel, which allowed us to roam freely across the land and sea for as long as fuel and ammunition allowed. We could go anywhere and attack anything. In the case of *Silent Service* encounters were randomised ensuring each game was unique.

Although I am still fond of the odd flight simulator and have clocked up countless hours on the PS3 conversion of *Birds Of Steel*, I often yearn for that *Elite*-style gameplay experience where missions can be accepted in a totally open-ended world. If titles such as *Red Dead Redemption* and the *Elder Scrolls* franchise can manage it successfully, then why not simulation games?

Stuart Hardy

We're hoping that the forthcoming *Elite: Dangerous* will restore some enthusiasm for this type of game in both players and developers, because we've been trying to think of similarly open-ended simulators on modern platforms and have come up short. You're quite right, as taking a spin in a game in any type of vehicle without a care in the world is always great fun.



» [C64] Stuart Hardy longs for the days of freeform simulation games like *ACE* and *Knights Of The Sky*.

From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

Worst sticking points



ArchaicKoala

The earliest memory of this for me probably goes to *Granny's Garden* – the map section where if you did things in the wrong order, the witch would catch you.

TwoHeadedBoy

That barrel going up and down in Carnival Night Zone in *Sonic 3*. Stupidly easy to solve in retrospect, but we were the first ones in school to get past it, so everyone was asking us what Ice Cap and Launch Base were like.

RetroAerosmith

I'll say one of the mine cart levels in *Donkey Kong Country* on the SNES. Usually when the cart was going uphill and there would either be a stray rock or bit of track you had to triple jump over, the frustration of watching as instead of a super jump you did a tiny leap and died…

joefish

Penetrator on the Spectrum – you get to the fifth level, fly over a volcano with some targets at the bottom, and then the cave top and bottom come together in an impossibly tight space you can't get through. What the hell? Turns out, you're supposed to drop a bomb straight down that column and hit those targets at the bottom to trigger a congratulations message, then you return to the game with a mirrored landscape to fly out again.

SirClive

Final Fantasy VII. 45 hours into the game and I got to the fight against Proud Clod. I didn't do enough levelling up before hand and there is no way to back out of the fight. That is just too much time to ever repeat so I doubt I will ever get to finish the game (unless we get the PS4 remake that I am dreaming of).

merman

Bruce Lee on the C64, for years I got stuck on the penultimate screen. Turns out the version I was playing was corrupted.

pforson

The Broken Bridge in *Fantasy World Dizzy*. As a kid I always fell down and stood there wondering what to do.

ncf1

Not uncommon but damn, this one had me eating walls as a kid: the babel fish puzzle in *Hitchhiker's Guide To The Galaxy*. I desperately wanted to get past that bit but couldn't. I never ended up getting past it until decades later.

Matt_B

Kung-Fu Master, for being in at the beginning of the genre and remaining one of its exemplars.

retro GAMER

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RAMPAGE™

Your ultimate guide to Bally Midway's anarchic building-smashing coin-op

Also Featured



Theme Hospital

■ Members of Bullfrog reveal how they created the follow-up to *Theme Park*



Crazy Taxi

■ From the original to the iOS sequel, Kenji Kanno talks exclusively about the franchise



Football frenzy

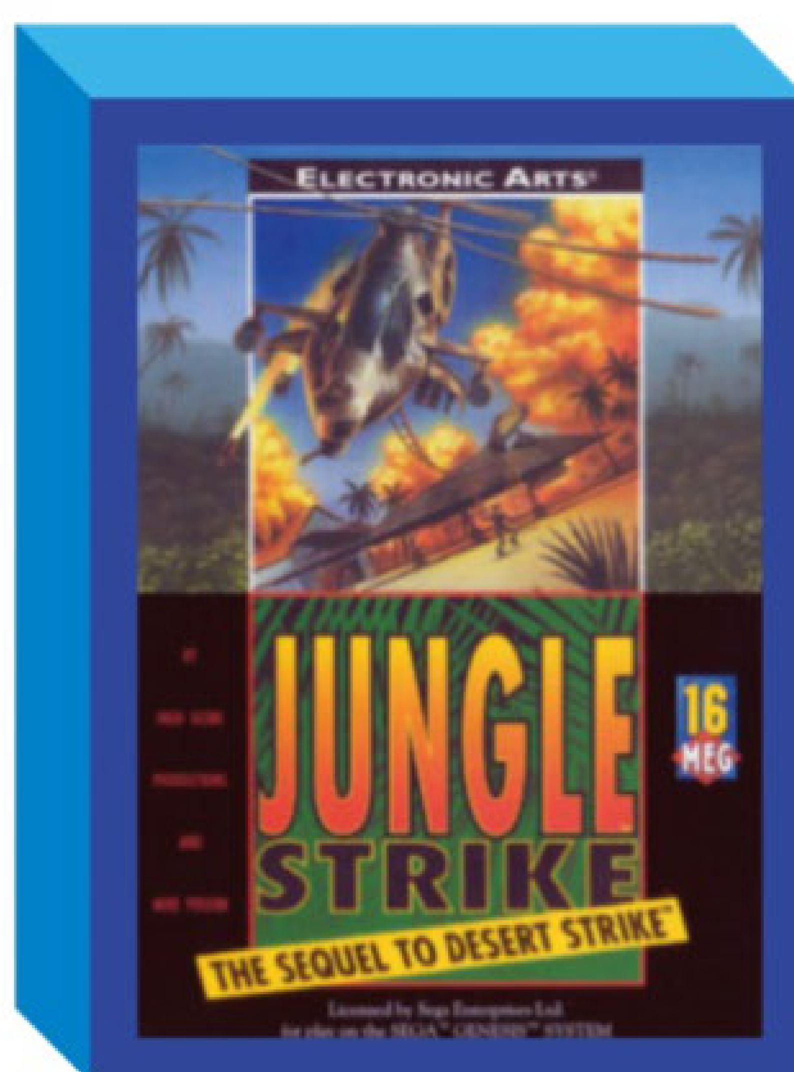
■ An all-star line-up looks back at the history of the beautiful game



Hard Drivin'

■ We go behind the scenes of the hit Atari coin-op that helped usher in 3D gaming

ENDGAME



JUNGLE STRIKE

» Life is hard when you're an expert helicopter pilot. Having vanquished the villainous General Kilbaba in the first game, you thought you were entitled to a bit of rest. No such luck – Ibn Kilbaba, black market arms dealer and son of the deceased warlord, has teamed up with the notorious drug lord Carlos Ortega and plans to blow up Washington DC with nuclear weapons. Get back to the chopper…



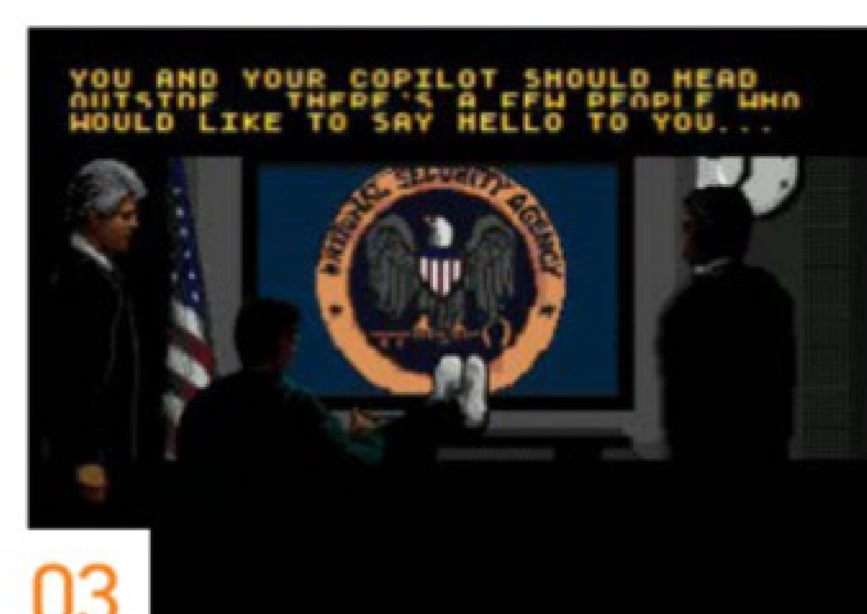
01

» Having thwarted a last-ditch escape attempt by the villains of the piece, our pilot is thanked by his commanding officer. Our pilot decides to remind us that he's a jerk as well as a hero by arrogantly brushing him off.



02

» Bill Clinton himself begins to weigh in with the praise, telling our man that he has prevented an unelected madman from exercising power over the free world. But the pilot is no politics junkie, and responds with little enthusiasm.



03

» He's beaten the bad guys and been rude to both his boss and his president – the pilot is on a roll and has almost finished his journey. But there's one more task left unfinished, so his boss ushers him outside…



04

» This is it – the victory parade. The pilot isn't in this for the praise of his superiors, and he certainly doesn't care about the ideological struggles of his government. What the pilot wants is a sports car, cheering crowds and TV interviews – and now he's got them all. Mission accomplished.



05

» Lastly, the teaser for a sequel. Is it the end? As it turned out, it wasn't. After abandoning work on *Postal Strike*, a sequel which was to take a drastic left turn by covering labour relations in the US Postal Service, Electronic Arts concluded the 16-bit trilogy with *Urban Strike*.